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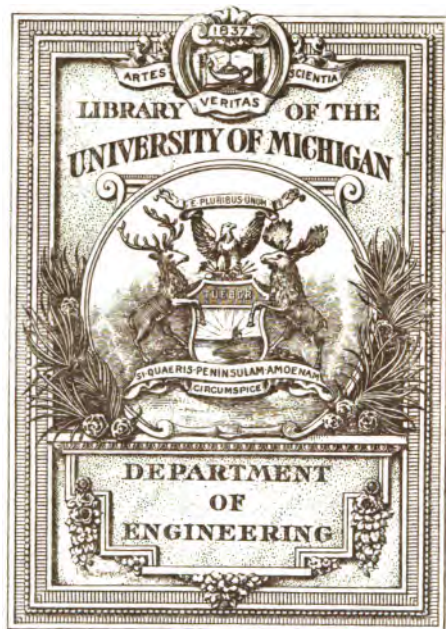
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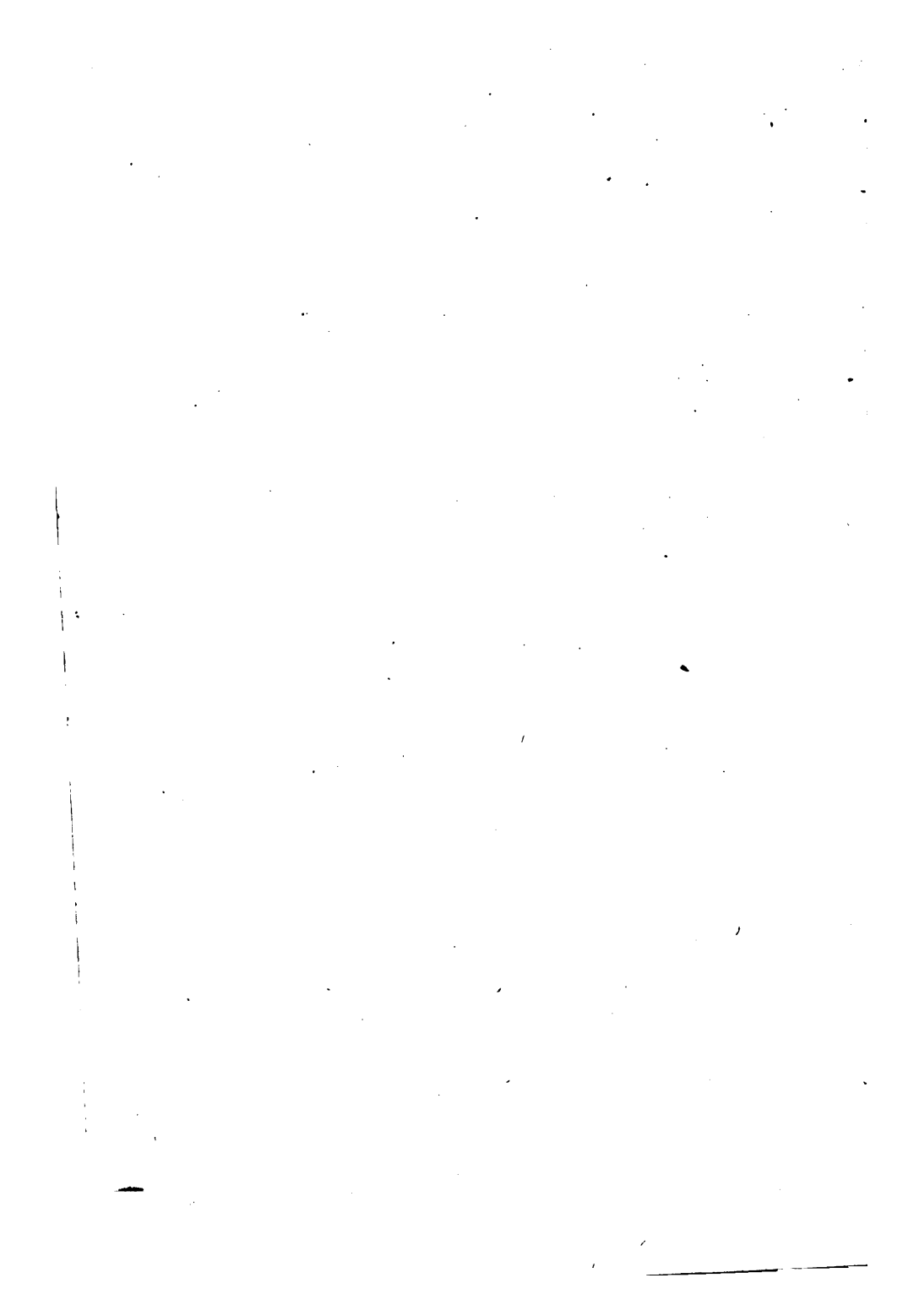
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1917



PRIVATES' —MANUAL—

(SECOND EDITION, REVISED AND ENLARGED)
Second Printing

By MAJOR JAS. A. MOSS
United States Army

(PRINTED JUNE, 1917)



PRICE \$1.00, POSTPAID
(Liberal Discount on Quantity)

PUBLISHERS
GEORGE BANTA PUBLISHING COMPANY,
MENASHA, WIS.

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by

JAS. A. MOSS

PREFATORY

142. inc. 6. 118/1
The many changes that have taken place during the last two or three years in the *Manual of Guard Duty* and other War Department publications and orders on which PRIVATES' MANUAL was mostly based, have rendered obsolete the first edition, which consisted of 10,000 copies. Hence, the necessity for a revised edition, which experience with the first edition has made advisable to enlarge considerably.

6. 118/1
The same conditions of activity and complexity of modern life that crowd into one day what our forefathers used to do in one week, and which have brought the stereopticon machine, moving pictures and other inventions into use to facilitate instruction in schools,—these same conditions make necessary a greater use of the printer's art in training and instructing the enlisted men of today, everyone of whom can read.

142. inc. 6. 118/1
The use of the printer's art in instructing the private soldier, as exemplified in PRIVATES' MANUAL, accomplishes three things:

1. In convenient, attractive, illustrated and understandable form, easily accessible at any time, it presents to the soldier the principal things that he should know.
2. It enables the lieutenants and the squad leaders and other company noncommissioned officers to assist

the company commander in a manner otherwise impossible, in the instruction of privates.

3. It enables the company commander to make more systematic, thorough and complete, the instruction of the privates of his company.

In short, PRIVATES' MANUAL reflects the spirit of the hour regarding method, system, simplicity, and intensiveness in military training and instruction, and it will enable the company commander to train and instruct his men more thoroughly than he otherwise could, and in much less time.

Jas. A. Moss.

Gatun, Canal Zone,
December 11, 1915.

The Patriot's Military Creed

I believe in Peace, but in Peace with Honor and Self-respect.

I believe that War is a terrible thing that should be avoided, if possible, but I also believe that there are things in this world worse than War, and Peace without Honor and Self-respect is one of them.

I believe in what the Flag of my Country stands for—Honor, Justice, Truth, Civilization, Democracy, Liberty, Humanity.

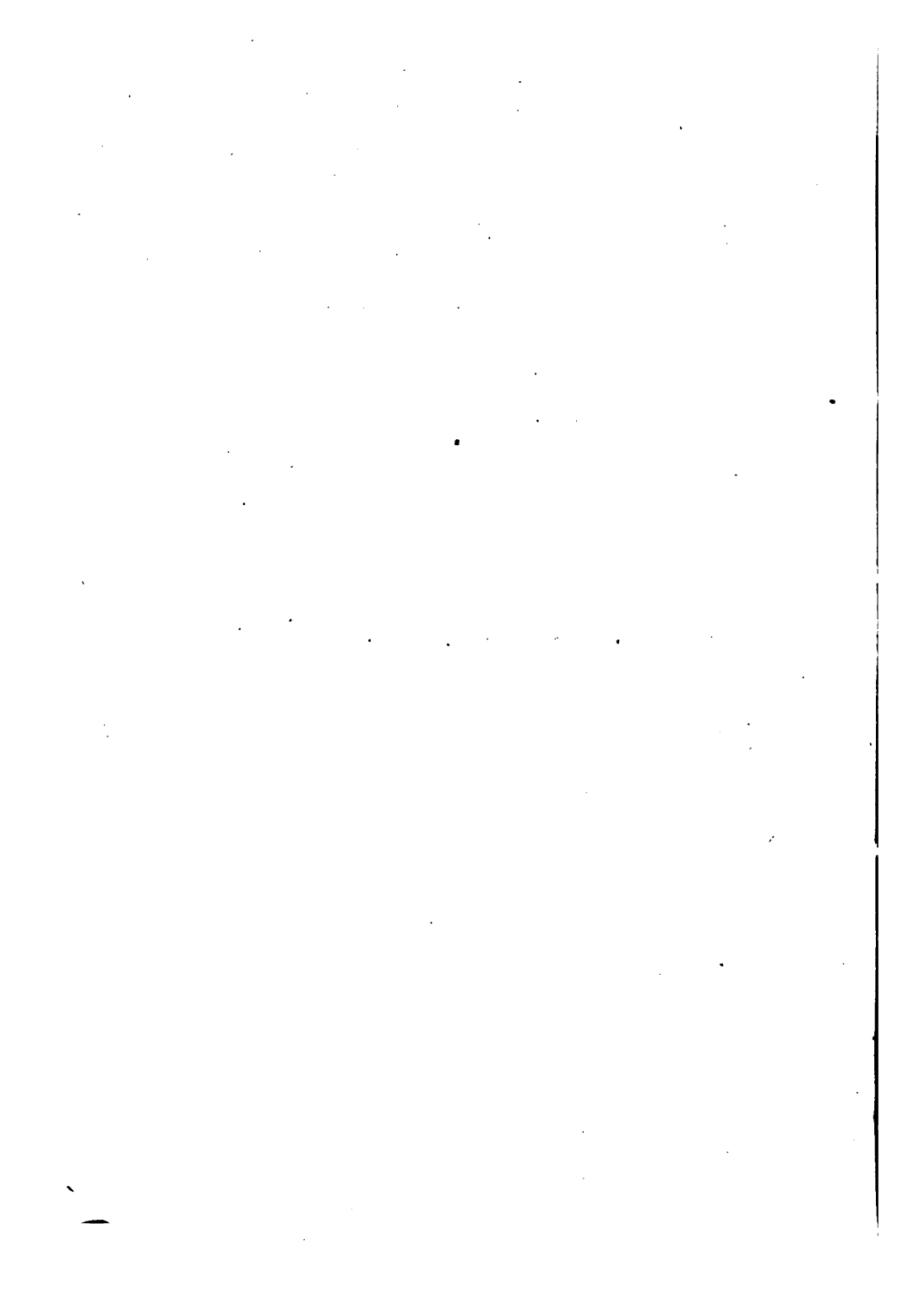
I believe it the duty of every American to uphold the Flag and what it stands for, and I believe it the duty of every able-bodied American to prepare himself in a Military way for this Responsibility.

I believe in Personal Preparedness, by which I mean if I am ever needed to defend my Sister, my Mother, my Home, and my Country, I will be Prepared to do so.

I believe in National Preparedness, by which I mean my Country being Prepared to uphold what the flag stands for and to defend itself if attacked.

I believe that Citizenship carries with it Obligations as well as Privileges, and I believe that Military Service is one of the most important of these Obligations.

I believe in the benefits of Military Training; I believe that it strengthens the body, benefits the health, improves the mind and teaches obedience, respect for law and order, patriotism, courtesy, honor, loyalty, manliness, cleanliness, thoroughness, system, organization and teamwork. In short, I believe in Military Training because it makes for Efficiency and better Citizenship.



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CHAPTER I

THE OBJECT AND ADVANTAGES OF MILITARY TRAINING

OBJECT

The object of all military training is to win battles.

Everything that you do in military training is done with some *immediate* object in view, which, in turn, has in view the *final* object of winning battles. For example:

Setting-up Exercises. The object of the setting-up exercises, as the name indicates, is to give the new men the *set-up*,—the bearing and carriage,—of the military man.

In addition these exercises serve to loosen up his muscles and prepare them for his later experiences and development.

Calisthenics. Calisthenics may be called the big brother, the grown-up form, of the setting-up exercise.

The object of calisthenics is to develop and strengthen all parts and muscles of the human body,—the back, the legs, the arms, the lungs, the heart and all other parts of the body.

First and foremost a fighting man's work depends upon his physical fitness.

To begin with, a soldier's mind must always be on the alert and equal to any strain, and no man's mind can be at its best when he is handicapped by a weak or ailing body.

The work of the fighting man makes harsh demands on his body. It must be strong enough to undergo the strain of marching when every muscle cries out for rest; strong enough to hold a rifle steady under fatigue and excitement; strong enough to withstand all sorts of weather, and the terrible nervous and physical strain of modern battle; and more, it must be strong enough to resist those diseases of campaign which kill more men than do the bullets of the enemy.

Hence the necessity of developing and strengthening every part and muscle of the body.

Facings and Marchings. The object of the facings and marchings is to give the soldier complete control of his body in drills, so that he can get around with ease and promptness at every command.

The marchings,—the military walk and run,—also teach the soldier how to get from one place to another in campaign with the least amount of physical exertion.

Every man knows how to walk and run, but few of them know how to do so without making extra work of it. One of the first principles in training the body of the soldier is to make each set of muscles do its own work and save the strength of the other muscles for their work. Thus the soldier marches in quick time,—walks,—with his legs, keeping the rest of his body as free from motion as possible. He marches in double time,—runs,—with an easy swinging stride which requires no effort on the part of the muscles of the body.

The marchings also teach the soldier to walk and run at a steady gait. For example, in marching in quick time, he takes 120 steps each minute; in double time, he takes 180 per minute.

Furthermore, the marchings teach the soldier to walk and run with others,—that is, in a body.

Saluting. The form of salutation and greeting for the civilian consists in raising the hat.

The form of salutation and greeting for the military man consists in rendering the military salute,—a form of salutation which marks you as a member of the Fraternity of Men-at-Arms, men banded together for national defense, bound to each other by love of country and pledged to the loyal support of its symbol, the Flag. For the full significance of the military salute see page 97.

Manual of Arms. The rifle is the soldier's fighting weapon and he must become so accustomed to the *feel* of it that he handles it without a thought,—just as he handles his arms or legs without a thought,—and this is what the manual of arms accomplishes.

The different movements and positions of the rifle are the ones that experience has taught are the best and the easiest to accomplish the object in view.

School of the Squad. The object of squad drill is to teach the soldier his first lesson in *team-work*,—and team-work is the thing that wins battles.

In the squad the soldier is associated with seven other men with whom he drills, eats, sleeps, marches, and fights.

The squad is the unit upon which all of the work of the company depends. Unless the men of each squad work together as a single man,—unless there is *team-work*,—the work of the company is almost impossible.

Company Drill. Several squads are banded together into a company,—the basic fighting unit. In

order for a company to be able to comply promptly with the will of its commander, it must be like a pliable, easily managed instrument. And in order to win battles a company on the firing line must be able to comply promptly with the will of its commander.

The object of company drill is to get such team-work amongst the squads that the company will at all times move and act like a pliable, easily managed whole.

Close Order. In close order drill the strictest attention is paid to all the little details, all movements being executed with the greatest precision. The soldiers being close together,—in *close order*,—they form a compact body that is easily managed, and consequently that lends itself well to teaching the soldier habits of attention, precision, team-work and instant obedience to the voice of his commander.

In order to control and handle bodies of men quickly and without confusion, they must be taught to group themselves in an orderly arrangement and to move in an orderly manner. For example, soldiers are grouped or formed in line, in column of squads, column of files, etc.

In close order drill soldiers are taught to move in an orderly manner from one group or formation to another; how to stand, step off, march, halt and handle their rifles all together.

This practice makes the soldier feel perfectly at home and at ease in the squad and company. He becomes accustomed to working side by side with the man next to him, and, unconsciously, both get into the habit of working together, thus learning the first principles of *team-work*.

Extended Order. This is the fighting drill.

Modern fire arms have such great penetration that if the soldiers were all bunched together a single bullet might kill or disable several men and the explosion of a single shell might kill or disable a whole company. Consequently, soldiers must be scattered,—*extended out*,—to fight.

In extended order not only do the soldiers furnish a smaller target for the enemy to shoot at, but they also get room in which to fight with greater ease and freedom.

The object of extended order drill is to practice the squads in team-work by which they are welded into a single fighting machine that can be readily controlled by its commander.

Parades, reviews, and other ceremonies. Parades, reviews and other ceremonies, with their martial music, the presence of spectators, etc., are intended to stimulate the interest and excite the military spirit of the command. Also, being occasions for which the soldiers dress up and appear spruce and trim, they inculcate habits of tidiness,—they teach a lesson in cleanliness of body and clothes.

While it is true it may be said that parades, reviews and other ceremonies form no practical part of the fighting man's training for battle, they nevertheless serve a very useful purpose in his general training. In these ceremonies in which soldiers march to martial music with flags flying, moving and going through the manual of arms with perfect precision and unison, there results a concerted movement that produces a feeling such as we have when we dance or when we sing in chorus. In other words, ceremonies are a sort of "get-together" exercise

which pulls men together in spite of themselves, giving them a shoulder-to-shoulder feeling of solidity and power that helps to build up that confidence and spirit which wins battles.

Discipline. By discipline we mean the *habit* of observing all rules and regulations and of obeying promptly all orders. By observing day after day all rules and regulations and obeying promptly all orders, it becomes second nature,—a fixed habit,—to do these things.

Of course, in the Army, like in any other walk of life, there must be law and order, which is impossible unless everyone obeys the rules and regulations gotten up by those in authority.

When a man has cultivated the habit of obeying,—when obedience has become second nature with him,—he obeys the orders of his leaders instinctively, even when under the stress of great excitement, such as when in battle, his own reasoning is confused and his mind is not working.

In order to win a battle the *will* of the commander as expressed through his subordinates down the line from the second in command to the squad leaders, must be carried out by everyone. Hence the vital importance of prompt, instinctive obedience on the part of everybody, and of discipline, which is the mainspring of obedience and also the foundation rock of law and order.

And so could we go on indefinitely pointing out the object of each and every requirement of military training, for there is none that has no object and that answers no useful purpose, although the object and purpose may not always be apparent to the young soldier.

And remember that the final object of all military training is to win battles.

ADVANTAGES OF MILITARY TRAINING

The following are the principal advantages of military training:

Handiness. The average man does one thing well. He is more or less apt to be clumsy about doing other things. The soldier is constantly called upon to do all sorts of things, and he has to do all of them well. His hands thus become trained and useful to him, and his mind gets into the habit of making his hands do what is required of them,—that is to say, the soldier becomes handy.

Handy arms are a valuable asset.

Self-control. In the work of the soldier, control does not stop with the hands.

The mind reaches out,—control of the body becomes a habit. The feet, legs, arms and body gradually come under the sway of the mind. In the position of the soldier, for instance, the mind holds the body motionless. In marching, the mind drives the legs to machine-like regularity. In shooting, the mind assumes command of the arms, hands, fingers and eye, linking them up and making them work in harmony.

Control of the body, together with the habit of discipline that the soldier acquires, leads to control of the mind,—that is, to *self-control*.

Self-control is an important factor in success in any walk of life.

Loyalty. Loyalty to his comrades, to his company, to his battalion, to his regiment becomes a religion with

the soldier. They are a part of his life. Their reputation is his; their good name, his good name; their interests, his interests,—so, loyalty to them is but natural, and this loyalty soon extends to loyalty in general.

When you say a man is loyal the world considers that you have paid him a high tribute.

Orderliness. In the military service order and system are watchwords. The smooth running of the military machine depends on them.

The care and attention that the soldier is required to give at all times to his clothes, accouterments, equipment and other belongings, instill in him habits of orderliness.

Orderliness increases the value of a man.

Self-confidence and self-respect. Self-confidence is founded on one's ability to do things. The soldier is taught to defend himself with his rifle, and to take care of himself and to do things in almost any sort of a situation, all of which gives him confidence in himself,—*self-confidence*.

Respect for constituted authority, which is a part of the soldier's creed, teaches him respect for himself,—*self-respect*.

Self-confidence and self-respect are a credit to any man.

Eyes trained to observe. Guard duty, outpost duty, patrolling, scouting and target practice, train both the eye and the mind to observe.

Power of observation is a valuable faculty for a man to possess.

Teamwork. In drilling, patrolling, marching, maneuvers and in other phases of his training and instruction, the soldier is taught the principles of team-

work,—coöperation,—whose soul is *loyalty*, a trait of every good soldier.

Teamwork,—coöperation,—leads to success in life.

Heeding law and order. The cardinal habit of the soldier is obedience. To obey orders and regulations is a habit with the soldier. And this habit of obeying orders and regulations teaches him to heed law and order.

The man who heeds law and order is a welcome member of any community.

Sound body. Military training, with its drills, marches, and other forms of physical exercise, together with its regular habits and outdoor work, keeps a man physically fit, giving him a sound body.

A sound body, with the physical exercise and outdoor life of the soldier, means good digestion, strength, hardiness and endurance.

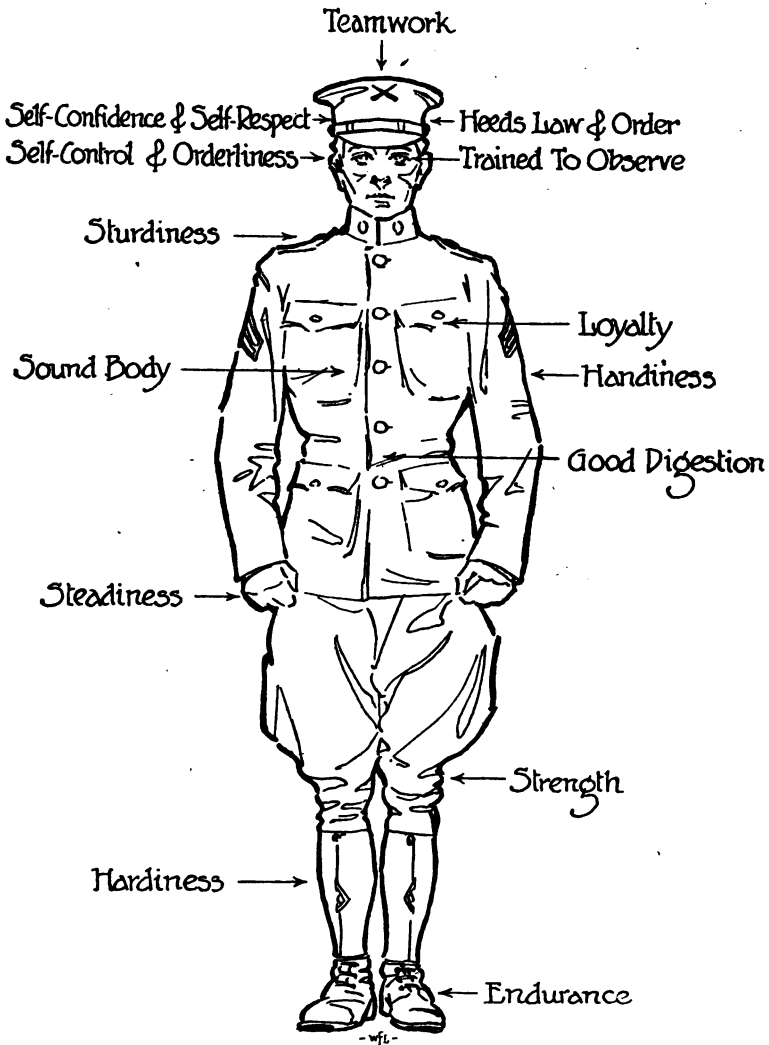
A sound body is, indeed, one of the greatest blessings of life.

THE TRAINED SOLDIER

Look at the trained soldier on the following page; study him carefully from top to bottom, and see what military training does for a man.

Privates' Manual

THE TRAINED SOLDIER



WHAT DO YOU THINK OF HIM, EH?

CHAPTER II

THE SOLDIER'S EQUIPMENT

Definition. By the *equipment* of a soldier we mean all the articles, excepting clothing, that are necessary for him to perform his duties.

In other words, the *equipment* of a soldier consists of the tools proper of his trade (rifle, bayonet, trenching tool, ammunition, canteen, mess can, etc.) and certain other articles that are necessary to his health and comfort (blanket, shelter tent, poncho, toilet articles, etc.).

The Load. The articles of equipment that the soldier carries constitute his *load*, which, not including the rifle and the clothes on his body; is divided into these three parts:

1. The *pack*, consisting of the blanket, poncho, shelter half and tent



Pack
(Blanket, poncho, shelter half, and tent pins)

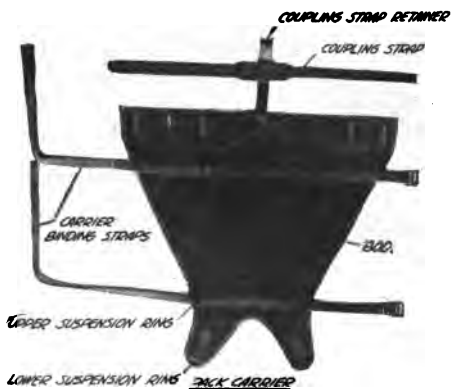


FIG. 1

pins, which is carried in the *pack carrier*, an irregular shaped piece of canvas provided with flaps, straps and buckles, which fold about and enclose the articles named.

2. The belt and the articles carried in it and attached to it (ammunition, canteen and first aid packet).



FIG. 2

The belt is attached to the haversack by means of suspenders.

3. The rest of the load, consisting of rations, mess outfit and toilet articles, which are carried in the *haversack*,—an irregular shaped piece of canvas provided with



FIG. 2a

The haversack load

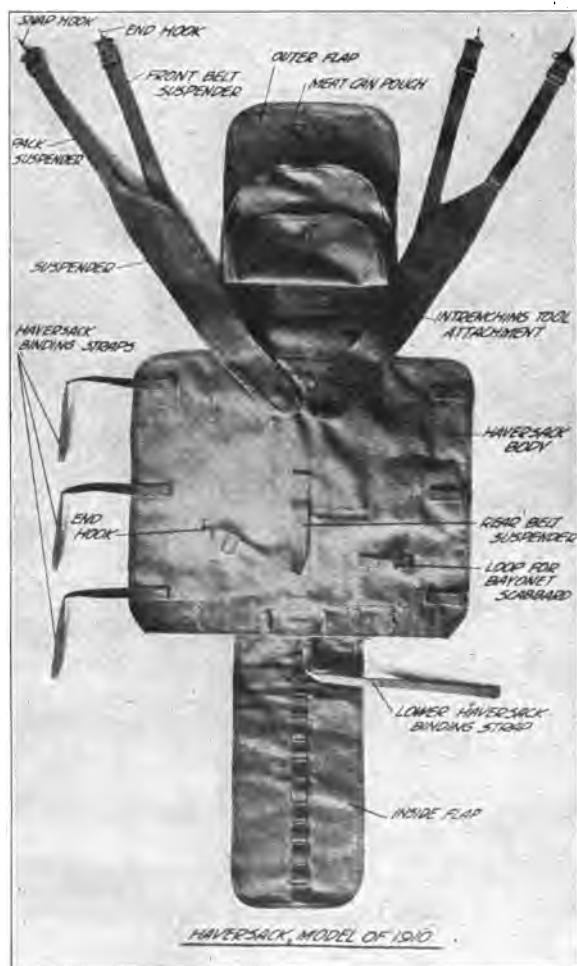


FIG. 3

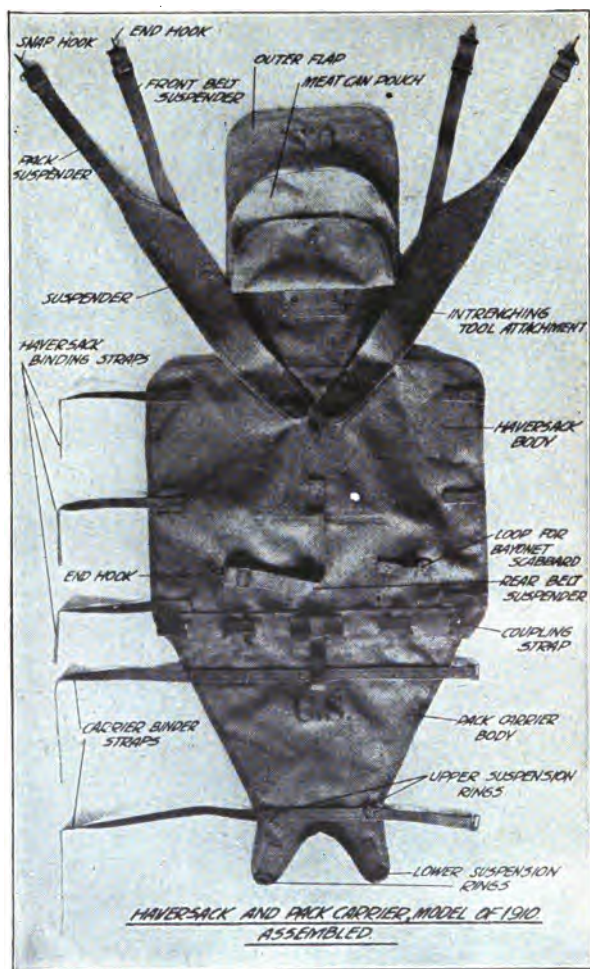


FIG. 4

flaps, straps, and buckles which fold about and enclose the articles named.

When carried, the pack is fastened to the haversack by means of a coupling strap passing through the button-holes in the edges of the pack carrier and the haversack.

By means of this coupling strap arrangement the articles (mostly shelter articles) that are not absolutely essential to the soldier can be readily detached for transportation or before going into a fight.

Weight of load. The weight of the load is as follows:

The pack (carrier, blanket, shelter tent, shelter tent pins and poncho.....	9 $\frac{1}{4}$ lbs.
The cartridge belt, with canteen (filled), 100 cartridges and first aid packet.....	11 $\frac{1}{2}$ lbs.
Rest of load (haversack, intrenching tool, 2 rations, mess outfit, toilet articles, bayonet and scabbard).....	10 $\frac{1}{2}$ lbs.
Total	31 $\frac{1}{4}$ lbs.
The clothes worn on body weigh.....	7 $\frac{3}{4}$ lbs.
The rifle and sling weigh.....	9 lbs.

Total 48 lbs.

This load of 48 pounds is less than that carried by the soldiers of any of the foreign armies. The British soldier, for example, carries a load of 52 pounds; the Japanese, 55; the French, 56; the German and Russian, 60; the Austrian, 68.

Rifle. The rifle is by far the heaviest article of the soldier's equipment, weighing with sling, nine pounds.

For a full description of the rifle and its proper care, see Chapter XI, page 218, and Chapter XII, page 239.

Belts. There are two kinds of belts: The field belt, called the *cartridge belt*, which is used in the field, and the *garrison belt*, for garrison wear.

Garrison belt. The following illustration shows the garrison belt:

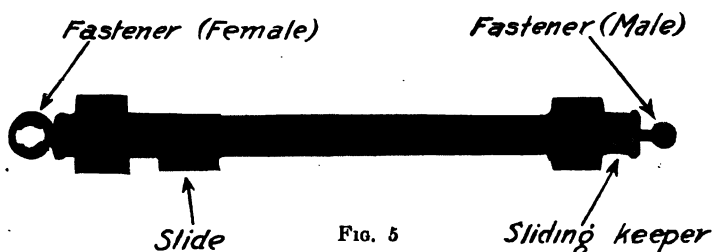


FIG. 5

Cartridge belt. The cartridge belt consists of three parts,—one adjusting strap and two pocket sections.

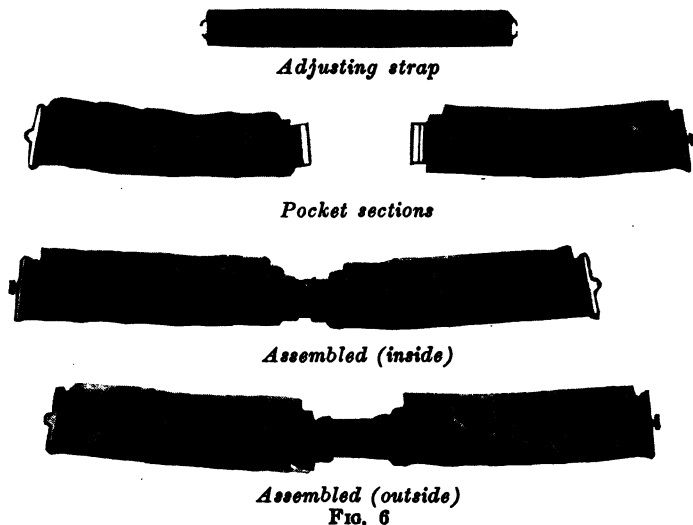


FIG. 6

To adjust the belt. The cartridge belt is adjusted by moving the adjusting strap through the loops of the metal guide and then engaging the wire hooks on the ends of the adjusting strap in the eyelets provided on the inner surface of the belt.

In order to engage the wire hooks in the eyelets pinch the belt, bringing the eyelets close together.



FIG. 7

Care must be taken that the adjustment is made equally from both ends of the adjusting strap, so that the center eyelet will be in the middle of the belt.

The belt must be adjusted so that it will fit loosely about the waist,—that is, so that when buckled it will rest well down over the hip bones on the sides of the body and below the pit of the abdomen in front.

A valuable feature of this belt is that its weight is taken off the hips and the abdomen by means of the suspenders that are fastened to the haversack, thus removing the objection that a heavy belt causes hernia, or contusion of internal organs.



FIG. 8

To fill the belt. Each section of the belt has five pockets for cartridges, making a total of ten pockets. Each pocket carries two clips (10 rounds) of cartridges, so that the belt carries 100 rounds (weighing 6 pounds).

To fill the belt—



FIG. 9

(a) Unsnap the flap of the pocket and the interior retaining strap; pull the retaining strap out flat in prolongation of the pocket; insert a clip of cartridges, *points of bullets up*, in front of the retaining strap, pressing down until the base of the clip rests on the bottom of the pocket. (Fig. 9.)

(b) Pass the retaining strap over the bullet points and fasten it to the outside of the pocket by means of the fastener provided. (Fig. 10.)



FIG. 11

(c) Insert a second clip of cartridges, *points of bullets down*, in rear of the first clip. (Fig. 11.)



FIG. 10

(d) Press down until the points of the bullets rest on the bottom of the pocket. (Fig. 12.)

(e) Close the flap of the pocket and fasten. (Fig. 13.)



FIG. 13

The remaining nine pockets are filled in like manner.



FIG. 13

Bandoleer. The bandoleer is worn over the shoulder and across the body.

It has six pockets, in each of which are carried two clips (10 rounds), so that the bandoleer carries sixty rounds.

The bandoleer is used only for carrying extra ammunition in battle, and before going into



FIG. 14

a fight two bandoleers filled with ammunition (120 rounds) are issued to each man.

The ammunition in the bandoleers is used first before touching any in the cartridge belt.

First-aid Pouch. This pouch, in case of Infantry, is attached under the *second pocket* of the *right section* of the belt by inserting one hook of the double hook attachment in the eyelet from the inside of the belt, and pinching the base of the pocket, so as to bring the eyelets close together, and then inserting the other hook in the same manner in the adjoining eyelet.

In this pouch is carried the first-aid packet, for the contents and use of which see page 91.



FIG. 15

Canteen, cup and cover. The canteen

cover, in which are carried the aluminum canteen and cup, is attached under the *rear pocket* of *right section* in the same manner as the first-aid pouch.

Canteen cover

Canteen

Cup



FIG. 16

The canteen carries a quart.

The cup is used as a cooking utensil for making coffee.

Bayonet scabbard. If the haversack is not worn,—that is, if only the belt is worn,—the bayonet scabbard is attached under the *fourth* pocket of the *left section* in the same manner as the first-aid pouch. See illustration, Fig. 4, page 99.

If the haversack is worn, the bayonet scabbard is attached to it by passing its lower end through the loop provided on the side of the haversack body, then engaging the double-hook attachment in the eyelet on the outer flap of the haversack, inserting the hooks from the inside. See illustration, Fig. 32, page 33.

The bayonet when not in use on the rifle or otherwise, is always carried in the scabbard.

To attach the Pack Carrier to the Haversack. Spread the haversack on the ground, inner side down, outer flap to the front, (a). (Fig. 17.)

Place the button-holed edge of the pack carrier on the button-holed edge of the haversack, lettered side of carrier up, the button-holes of the carrier placed on the corresponding ones of the haversack, (b).

Lace the carrier to the haversack by passing the ends of the coupling strap down through the corresponding buttonholes of the carrier and haversack nearest the center of the carrier, bringing the ends up through the next button-holes and continuing to the right and left, respectively, to both sides, (c).

To attach the Cartridge Belt to the Haversack. Place the haversack and pack carrier (assembled) on the ground, inner side down. (Fig. 18.)

Place the cartridge belt, pockets down, tops to the front, along the junction of the haversack and carrier, (a).

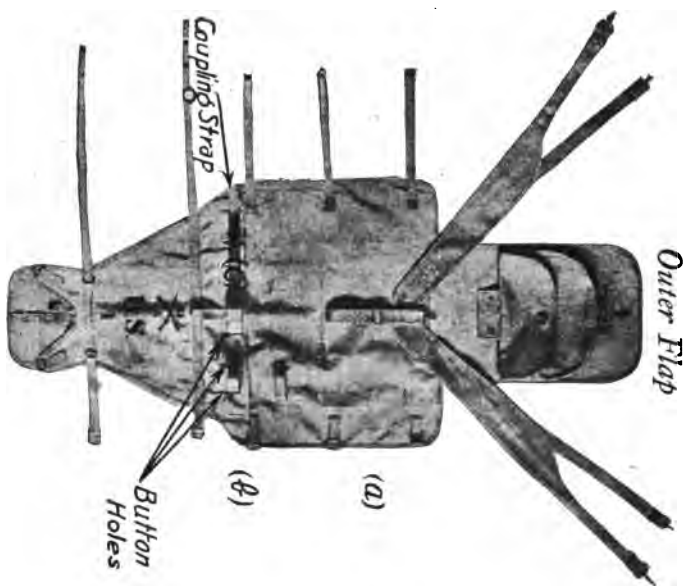


Fig. 17

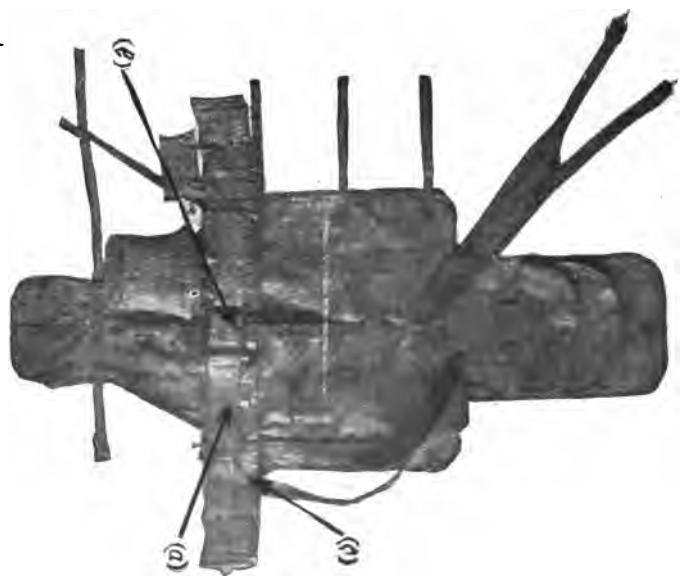


Fig. 18

Insert hook on rear belt suspender in the center eyelet of the adjusting strap; so that the end of the hook will be on the outside of the belt, (b).

Insert the hooks on the ends of the front belt suspenders in the eyelets between the second and third pockets from the outer end of the belt, so that the end of the hooks will be on the outside of the belt, (c).

Intrenching Tools. The intrenching tools are of two kinds,—one is a shovel and the other a combined pick and mattock.

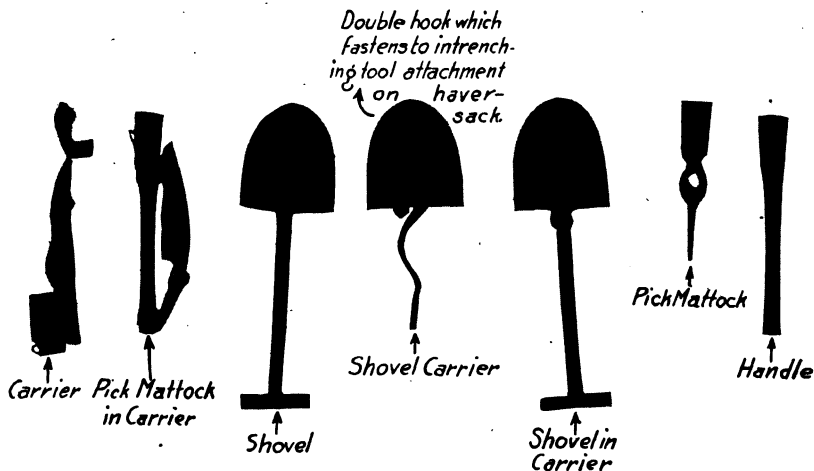


FIG. 19

The intrenching tools are carried in carriers that are attached to the haversack.

The intrenching tools are carried by the following men:

1 Shovel, each, by Nos. 1, 2 and 3 of front rank.

1 Pick mattock, by No. 1, rear rank, each *even* numbered squad.

How to attach the Intrenching Tool Carrier to the Haversack.

(a) Fold the outer flap of the haversack over so that the meat-can pouch is uppermost.

(b) Pass the intrenching tool carrier underneath the meat-can pouch and engage the double-hook attachment in the eyelets in the flap provided, inserting the hooks from the underside.

Place the intrenching tool in the carrier and secure.

Hand ax, bolo and wire-cutter. These implements with their carriers are shown below:

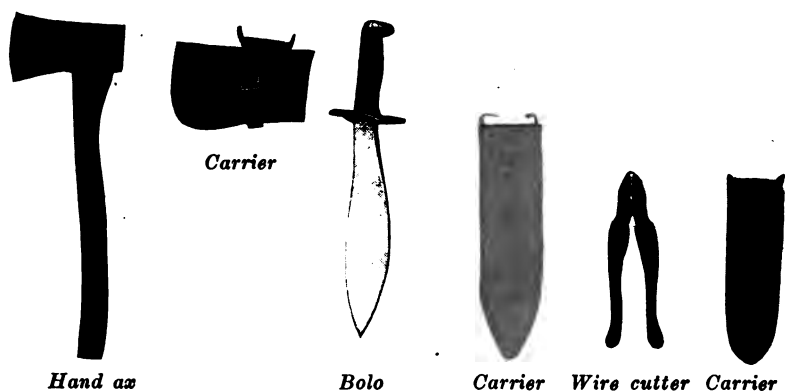


FIG. 20

They are carried as follows:

- 1 Bolo by No. 3 rear rank, each *odd* numbered squad.
- 1 Hand ax by No. 3, rear rank, each *even* numbered squad.
- 1 Wire cutter by each musician and by No. 2, rear rank, of each squad.

It is not prescribed on what part of the belt any of the above tools shall be carried, but in practice they are generally attached to the left section of the belt; in the position most convenient to the wearer.

Meat can, knife, fork and spoon.

The meat can, which is made of aluminum, consists of two parts, a and b,—the first (a) having a handle,

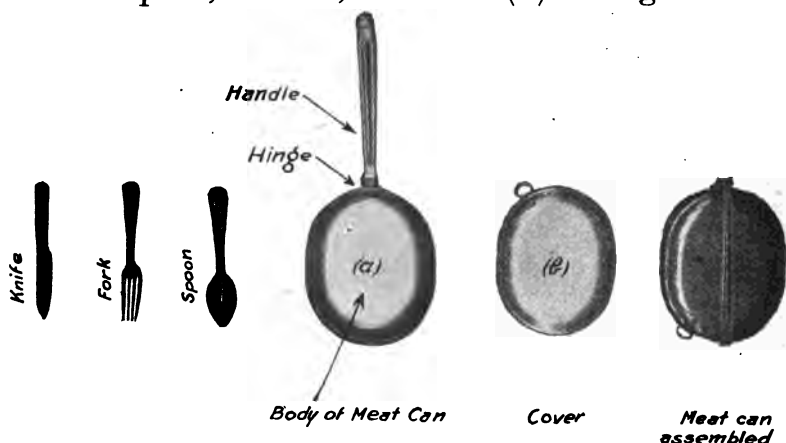


FIG. 21

and being used as a cooking utensil, while the second part (b) is used as a plate.

The knife, fork and spoon are carried in the meat can, which is closed and carried in the meat-can pouch of the haversack.



FIG. 22
Bacon can

Bacon Can. When rations are carried in the haversack, the bacon, in order to protect the haversack and the other articles therein from the grease, is carried in the tin bacon can.

Condiment Can. The condiments (salt and pepper) and coffee are carried in the tin condiment can.

It is divided into two compartments, a and b, for carrying three days' rations of coffee and sugar. The

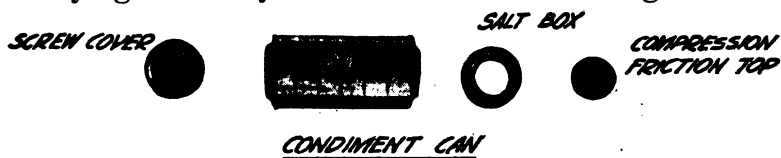


FIG. 23

ends of the cans have threaded openings for screw covers.

The screw cover on the sugar compartment has a round receptacle, closed with a compressed friction top, for carrying a three days' ration of salt.

Shelter tent. Each soldier carries a shelter tent half of this shape, and five aluminum pins, the two halves



FIG. 23a

being buttoned together along the longest edge and forming a tent that will accommodate two men.

The rifle supports the front end of the tent and the bayonet or intrenching tool the rear.

Where suitable material is available, tent poles may be improvised and used instead of the rifle and bayonet or intrenching tool.



FIG. 23b

NOTE: When the present supply of mounted and dismantled shelter tents is exhausted, a new pattern will be issued.

Toilet articles. The toilet articles that a soldier is required to carry consist of—

- | | |
|-------------|---------------|
| 1 comb | 1 towel |
| 1 cake soap | 1 tooth brush |

(**NOTE.**—The order does not prescribe a soap box, but every soldier should carry his soap in a metal or other box.)

Field, Surplus Kits and Service Kits. The “Field Kit,” clothing component, for all arms of the service, in addition to the clothing worn on the person, is composed of the toilet articles named above and—

- | | |
|---------------------------|------------------------|
| 1 blanket | 2 stockings, prs. |
| 1 drawers, pr. | 1 undershirt |
| 1 poncho (dismounted men) | 1 housewife (for 1 man |
| 1 slicker (mounted men) | of each squad) |

This “Field Kit,” which is carried on the person by dismantled men and on the packed saddle by mounted

men, is supplemented by the "Surplus Kit," the two together forming the clothing component of the "Service Kit."

The "Surplus Kit" consists of—

- | | |
|----------------------|--------------------------|
| 1 breeches, pr. | 2 stockings, prs. |
| 1 drawers, pr. | 1 shoe laces (extra pr.) |
| 1 shirt, olive drab | 1 undershirt |
| 1 shoes, russet, pr. | |

The "Surplus Kit" is carried in the Surplus Kit Bag, of which there is one to each squad; the articles are packed as follows:

Stockings to be rolled tightly, one pair in the toe of each shoe; shoes placed together, heels at opposite ends, soles outward, wrapped tightly in underwear, and bundle securely tied around the middle by the extra pair of shoe laces, each bundle to be tagged with the company number of the owner. These individual kits will be packed in the Surplus Kit Bag in two layers of four kits each, the breeches and olive drab shirts to be neatly folded and packed on the top and sides of the layers, the jointed cleaning rod and case, provided for each squad, being attached by the thongs on the inside of the bag. (Par. 1, G. O. 56, W. D., 1915.)



FIG. 23c
Surplus Kit Bag

The foot powder and adhesive plaster provided for each squad, are also packed in the Surplus Kit Bag by some company commanders.

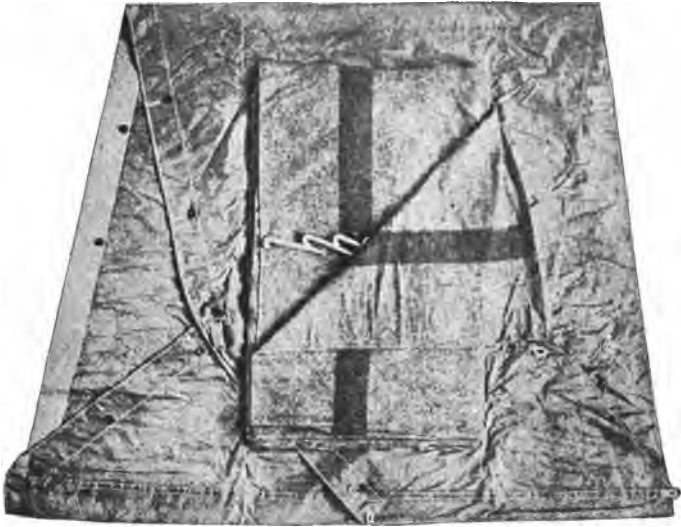


FIG. 24

The Pack. The pack is made as follows:

(a) Spread the shelter tent on the ground. (Fig. 24.)

(b) Fold the triangular ends, forming an approximate square, the guy on the inside.

(c) Fold the poncho once across its shortest dimension.

(d) Then fold it twice across its longest dimensions, and lay it on the center of the shelter half.

(e) Fold the blanket as described for the poncho and place it on the poncho, placing the five shelter tent pins in the fold of the blanket, in the center and across the shortest dimension.

(f) Fold the edges of the shelter half snugly over the blanket and poncho.

(g) Beginning on either of the short sides, roll tightly and compactly.

This forms the pack.

(NOTE.—The method above given of making the pack is that prescribed in the Ordnance Department pamphlet, "Instructions for Assembling the Infantry Equipment." However, experience has shown that the following modification gives a better pack:

(a) Proceed as described above, except that the poncho and blanket when placed on the shelter tent, are considerably nearer the shorter edge of the shelter tent than they are to the longer

edge, which splays out somewhat when the edges of the shelter tent are folded over the blanket; also about six inches of the longer edge is folded under, thus—



FIG. 25

- (b) Beginning on the shorter end, roll tightly and



FIG. 26

- (c) When through rolling, skin the 6-inch apron back over the fold as shown in this illustration:



FIG. 27

**TO ASSEMBLE THE EQUIPMENT WITHOUT THE
PACK**

(With Rations)

(a) Place the haversack and cartridge belt on the ground as shown in the illustration. (Fig. 28.)



FIG. 28

(b) Place the four cartons of hard bread, the bacon can, and condiment and the toilet articles in one row



FIG. 29

Showing how the binding straps are passed through the buckles

in the middle of the haversack body, the toilet articles at the top, the bacon can at the bottom, top to the front, the row extending from top to bottom of the haversack.

(c) Fold the inside flap over the articles. (Fig. 28.)

(d) Fold the sides of the haversack up and over the articles, passing the three haversack binding straps through the loops on the inside flap and securing them by means of the buckles on the opposite side of the



FIG. 30

haversack; pass the lower haversack binding strap through the small button-hole in the lower edge of the haversack. (Fig. 30.)



FIG. 31

(e) Fold the outer flap of the haversack over the whole and secure by means of the buckle on its underside and the lower haversack binding strap; pass the haversack suspension rings through the contiguous button-holes in the lower edge of the haversack and engage the snap hooks on the ends of the pack suspenders. (Fig. 31.)

If one haversack ration and one emergency ration are carried instead of two haversack rations, the haversack is packed in the manner described above, except that one emergency ration is substituted for two of the cartons of hard bread.

If one emergency ration is carried in addition to the two haversack rations, it is placed on top of the layer.

TO ASSEMBLE THE EQUIPMENT WITHOUT THE PACK

(Without Rations)

(a) Place the haversack and cart-ridge belt on the ground as previously described; fold up the inside flap of the haversack until its upper end is on a line with the top of the haversack body.

(b) Fold the sides of the haversack over, pass the three haversack binding straps through the loops on the inside flap and secure by means of the buckles on the opposite side of the haversack.

(c) Pass the lower haversack binding strap through the small buttonhole in the lower edge of the haversack; place



FIG. 32

*Equipment without
pack and without
rations*

the condiment and bacon cans (the former inside the latter) and the toilet articles and socks in the bottom of the pouch thus formed.

(d) Fold the outer flap of the haversack over the whole and secure by means of the buckle on its underside and the lower haversack binding strap; pass the haversack suspension rings through the contiguous button-holes in the lower edge of the haversack and engage the snap hooks on the ends of the pack suspenders.

TO ASSEMBLE THE FULL EQUIPMENT (*With Rations*)

(a) Place the assembled equipment on the ground, suspender side of the haversack down, pockets of cartridge belt up, haversack spread out, inside flap (a) and pack carrier (b) extended their full length to the rear. (Fig. 33.)

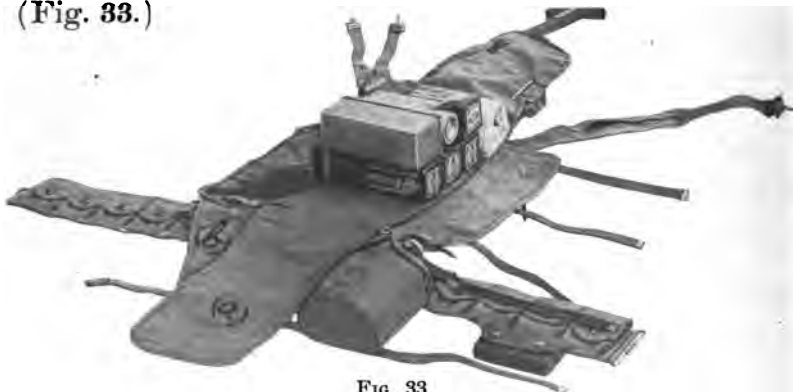


FIG. 33

(b) Place three cartons of hard bread in the center of the haversack body, the lowest one on the line of attachment of the inside flap; lay the remaining carton of hard bread, the condiment can and the bacon can on top

of these, the condiment can and the bacon can at the bottom; the socks and toilet articles are rolled, towel on outside, into a bundle of about the same size as a carton of hard bread and are placed in front of the two rows thus formed. (Fig. 33.)

(Note. If one haversack ration and one emergency ration are carried instead of two haversack rations, the haversack is packed in the manner described above, except that two cartons of hard bread and the bacon can form the bottom layer, the bacon can on the bottom; the condiment can, the emergency ration, and the toilet articles form the top layer.

If one emergency ration is carried in addition to the two haversack rations, it is packed on top of the top layer.)

(c) The inside flap of the haversack is folded over these articles, the end of the flap being turned in so that the flap, thus shortened, extends about two inches beyond the top of the upper row. (Fig. 34.)



FIG. 34

(d) The sides of the haversack are folded over the layer of articles, and the upper and middle haversack binding straps are passed through the loops on the outside of the inside flap and fastened to the haversack buckles on the opposite side; the binding straps are pulled tight to make the fastening secure.

(Fig. 35.)

(e) The outer flap of the haversack is folded over and fastened by means of the lower haversack binding strap and the buckle on the inside of the outer flap; the strap is pulled tight, drawing the outer flap snugly over the filled haversack.

(Fig. 36.)

The haversack is now packed and the pack carrier is ready for the reception of the pack.

To Assemble the Pack. (a) Place the pack in the pack carrier and grasp the lower suspension rings, one in each hand; place the right knee against the bottom of the roll. (Fig. 36.)

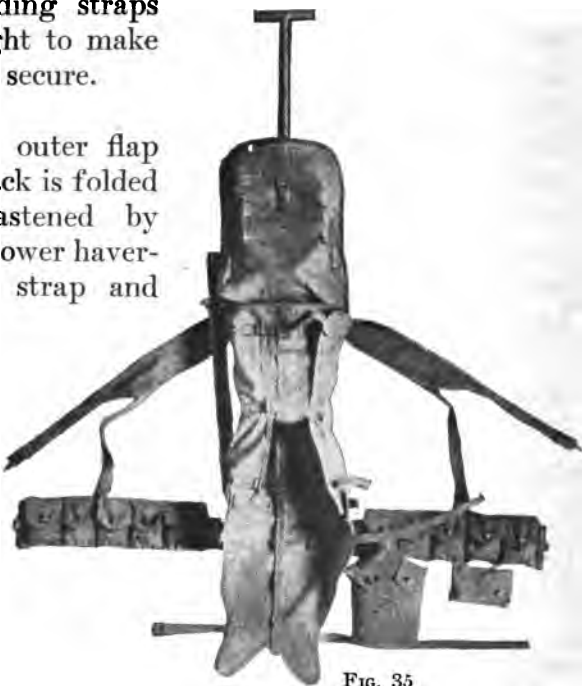


FIG. 35



FIG. 36

(b) Pull the carrier down and force the pack up close against the bottom of the packed haversack. (Fig. 36.)



FIG. 37

Without removing the knee, pass *the lower carrier binding strap, (a)*, over the pack and secure it by means of *the opposite buckle, (b)*; in a similar manner secure *the lower haversack binding strap, (c)*, and then the *upper carrier binding strap, (d)*. (Fig. 37.)

(c) Engage the snap hook, (e), on the pack suspenders in the lower suspension rings. (Fig. 38.)



FIG. 38

The equipment is now assembled and packed as prescribed for the "FULL EQUIPMENT."

TO ASSEMBLE THE FULL EQUIPMENT

(Without Rations)

(a) Place the equipment on the ground as heretofore described.

(b) Fold up the inside flap of the haversack so that its end will be on a line with the top of the haversack

body; fold up the lower haversack strap in the same manner. (Fig. 39.)



FIG. 39

To make up the Pack. Fold the poncho, blanket and shelter half, and make up the pack as heretofore described (pages 27-30), except that the condiment and bacon cans (the former inside the latter) and the toilet articles and socks are rolled in the pack.

In this case the pack is rolled, beginning on either end of the *long* sides instead of the short sides, as heretofore described.

To Assemble the Pack. (a) Place the pack on the haversack and pack carrier, its upper end on a line with the upper edge of the haversack body. (Fig. 40.)



FIG. 40

(b) Bind it to the haversack and carrier by means of the haversack and pack binding straps. (Fig. 41.)



FIG. 41

(c) Fold down the outer flap on the haversack and secure it by means of the free end of the middle haversack binding strap and the buckle provided on the under side of the flap; engage the snap hooks of the pack suspenders in the lower suspension rings. (Fig. 42.)



FIG. 42

The equipment is now packed and assembled.

TO PUT ON AND ADJUST THE EQUIPMENT

(a) Raise the equipment, slipping the arms one at a time through the pack suspenders as through the sleeves of a coat. (Figs. 43 and 44.)



FIG. 43



FIG. 44

(b) By means of the adjusting buckles on the belt suspenders, raise or lower the belt until it rests *well down over the hip bones on the sides and below the pit of the abdomen in front.* (See Fig. 8, page 17.)

By means of the adjusting buckles on the pack suspenders, raise or lower the load on the back until the pack suspenders, from their point of attachment to the line of tagency with the shoulder, are horizontal. *This*

*Adjusting equipment**Side view**Rear view**Equipment adjusted*

FIG. 45

is absolutely necessary for the proper adjustment of the load.

To discard the pack without removing the equipment from the body.

Unsnap the pack suspenders from the suspension rings and snap them into the eyelets on top of the belt and in rear of the rear pockets of the right and left pocket sections; support the bottom of the pack with the

left hand and with the right hand grasp the coupling strap at its middle and withdraw first one end, then the



FIG. 46



FIG. 47

other; press down gently on the pack with both hands and remove it.

When the pack has been removed, lace the coupling strap into the button-holes along the upper edge of the carrier. Adjust the pack suspenders.

CHAPTER III

CARE AND PRESERVATION OF CLOTHING AND EQUIPMENT

General. A soldier's clothing and equipment are issued to him by his government for certain purposes, and he has, therefore, no right to be in any way careless or neglectful of them.

The importance that the Government attaches to the proper care and preservation of the soldier's clothing and equipment, is shown by the fact that the matter is made the subject of one of the Articles of War, the 17th, which prescribes that any soldier who, through neglect, loses or spoils his arms, clothing or accouterments shall suffer such punishment as a court-martial may direct.

CLOTHING

Every article of clothing in your hands should receive as much care and attention as you give your person.

Not only will your clothes last longer if properly cared for, but you will look neater and better dressed, which will add much to your military appearance.

Every soldier should have an A-1 whisk broom and no article of clothing should ever be worn without first being thoroughly brushed.

Pressing. Occasional pressing helps to preserve and freshen clothes,—it puts new life into the cloth.

Blue clothing and woolen olive drab when worn regularly should be pressed about once a week.

In a company where there is an iron for general use there is no reason why every soldier should not press his own clothes.

Chevrons and stripes can be cleaned by moistening a clean woolen rag with gasoline and rubbing the parts and then pressing with a hot iron.

Leggins. When soiled, leggins must be washed. If the leggins are allowed to dry without being rung out, they will look better.

Service hat and the caps require nothing but brushing.

Shirts, underwear, socks, etc., should be carefully folded and put away neatly.

A special suit of clothing for inspections, parades, etc. Set aside your best suit of clothes for inspections, parades and other ceremonies. The uniform worn at these formations should not be worn around in the barracks,—every man has sufficient “second best” garments for barrack use.

Putting away. Uniforms should be dried thoroughly, brushed and properly folded before being put away. The number of folds should be reduced to a minimum.

Before uniforms are put away they should be carefully examined and any missing buttons, tears or stains should be attended to at once.

Lockers and other places in which clothing is kept must be free from dust. They should be wiped off occasionally with a cloth wrung out of soap suds.

Stains. Tailors usually remove stains with a rubber made by rolling tightly a piece of woolen cloth of some kind, about 2 inches wide, until the roll is about an inch in diameter.

Rings in removing stains may be avoided by rubbing until very nearly dry.

Grease spots. Ordinarily benzine is a good stain remover in case of grease spots, but its use is more or less dangerous. It should be used in an open room or out of doors and never near a fire or lights.

"Carbona," which can be purchased in almost any drug store, is excellent for removing stains and it is perfectly safe.

Carbon tetrachloride (Merck's) is much cheaper than "Carbona" and about equally as good. It retails at 45c a pint at nearly all drug stores.

Grease spots can also be removed by placing a piece of brown paper, newspaper, blotting paper or other absorbent paper over the stain, and pressing with a hot iron.

Rust or ink stains can be removed with a solution of oxalic acid. Apply rapidly and rinse at once with plenty of fresh water; this is most important—otherwise it will probably discolor the material.

Sweat stains can not be removed. However, the color can be partially restored and the material cleaned with a solution of ammonia and water— $\frac{1}{3}$ liquid ammonia, $\frac{2}{3}$ water.

The shine that is sometimes left from pressing is caused by leaving the iron on too long or using an iron that is too hot.

This shine, if the cloth is not scorched, can be removed by "sponging," i. e., by placing a piece of damp muslin cloth on the material and then applying the iron only long enough to steam the surface of the garment.

Grease and oil stains on white trouser stripes can be removed with benzine, naptha or gasoline, applied with

a stiff nail brush. Stains of rust and ink can be removed by means of oxalic acid (2 ounces of oxalic acid to 1 pint of water—dissolves quickest in warm water) applied with cloth or brush, then rinsed thoroughly with plain water and sponge. After the stripes have dried, apply English pipe-clay, rubbing with the cake itself; then rub in uniformly with woolen cloth rubber—rub vigorously—then brush off surplus pipe-clay.

Paint spots. Turpentine will take out paint spots.

Gilt ornaments and gilt buttons should be polished as often as necessary in order to keep them fresh and bright. Use a button stick in cleaning buttons, so as not to soil the cloth.

SHOES

(Instructions issued by the Quartermaster General's Office, June 16, 1899.)

General care. Shoes should at all times be kept polished. By being so kept they are made more pliable and wear longer.

Shoes must withstand harder service than any other article worn, and more shoes are ruined through neglect than by wear in actual service.

Proper care should be taken in selecting shoes to secure a proper fit, and by giving shoes occasional attention much discomfort and complaint will be avoided.

Selection. A shoe should always have ample length, as the foot will always work forward fully a half a size in the shoe when walking, and



sufficient allowance for this should be made. More feet are crippled and distorted by shoes that are too short than for any other reason. A shoe should fit snug yet be comfortable over ball and instep, and when first worn should not lace close together over the instep. Leather always stretches and loosens at instep and can be taken up by lacing. The foot should always be held firmly, but not too tightly in proper position. If shoes are too loose, they allow the foot to slip around, causing the foot to chafe; corns, bunions, and enlarged joints are the result.

Repairs. At the first sign of break, shoes should be repaired, if possible. Always keep the heels in good condition. If the heel is allowed to run down at the side, it is bad for the shoe and worse for the foot; it also weakens the ankle and subjects the shoe to an uneven strain, which makes it more liable to give out. Shoes, if kept in repair, will give double the service and comfort.

Shoe dressing. The leather must not be permitted to become hard and stiff. If it is impossible to procure a good shoe dressing,¹ neat's-foot oil or tallow are the best substitutes; either will soften the leather and preserve its pliability. Leather requires oil to preserve its pliability, and if not supplied will become brittle, crack, and break easily under strain. Inferior dressings are always harmful, and no dressing should be used which contains acid or varnish. Acid burns the leather as it would the skin, and polish containing varnish forms a false skin which soon peels off, spoiling the appearance of the shoe and causing the leather to crack. Paste polish containing turpentine should also be avoided.

¹ "Viscol" is the best oil for softening all kinds of leather that the author knows of. It is made by The Viscol Co., East Cambridge, Mass., and can be obtained from the post exchange.

Perspiration. Shoes becoming damp from perspiration should be dried naturally by evaporation. It is dangerous to dry leather by artificial heat. Perspiration contains acid which is harmful to leather, and shoes should be dried out as frequently as possible.

Wet shoes. Wet or damp shoes should be dried with great care. When leather is subjected to heat, a chemical change takes place, although no change in appearance may be noted at the time. Leather when burnt becomes dry and parched and will soon crack through like pasteboard when strained. This applies to leather both in soles and uppers. When dried the leather should always be treated with dressing to restore its pliability. Many shoes are burned while on the feet without the knowledge of the wearer by being placed while wet on the rail of a stove or near a steam pipe. Care should be taken while shoes are being worn never to place the foot where there is danger of their being burned.

(Note. To dry wet shoes, the last thing at night take a few handfuls of dry clean pebbles, heat them in meat can, kettle or campfire until very hot; place them in the shoes,—they will dry them out thoroughly in a few hours,—shake once in awhile. Oats or corn may also be used, but they are not available always and pebbles usually are. Now is an excellent time to grease or oil the shoes.—Author.)

Keep shoes clean. An occasional application of soap and water will remove the accumulation of old dressings and allow fresh dressing to accomplish its purpose.

Directions for polishing. Russet leather should be treated with great care. Neither acid, lemon juice, nor

banana peel should be used for cleaning purposes. Only the best liquid dressing should be used and shoes should not be rubbed while wet.

Liquid dressing. Care should be taken in using liquid dressing. Apply only a light coat and *allow this to dry into the leather before rubbing* with a cloth. Too much dressing is wasteful.

EQUIPMENT

(Instructions issued by the Ordnance Department in Pamphlet No. 1965, July 12, 1915.)

Cloth Equipment

General. All cloth equipment should be brushed frequently with a stiff bristle brush. A dry scrub brush may be used.

It should be washed only under the direction and supervision of an officer.

During ordinary garrison duty it should rarely be necessary to wash the equipment.

When the equipment becomes soiled a light local washing will frequently be sufficient, but when dirty it should unhesitatingly be given a good thorough washing,—otherwise it may be expected that it will become unsanitary and rot.

During field service it is to be expected that the equipment will become soiled much more rapidly. Always on return to garrison from field service and as opportunity offers in the field, equipment should be thoroughly washed.

Instructions for washing cloth equipment.

(a) *Preparation of soap solution.* Dissolve in nine cups of hot water one cake of H. & H. soap or a substitute which is issued by the Ordnance Department.

One cup of this solution is sufficient to clean the entire cloth and web equipment of one man. One cake per squad is a liberal allowance.

The H. & H. soap issued by the Ordnance Department is made especially for washing cloth fabrics liable to fade. If for any reason this soap is not obtainable, a good laundry soap (Ivory or equal) may be used, but in no case should the yellow soap issued by the Quartermaster Corps be used.

(b) *Brushing.* Brush the equipment thoroughly to remove all dust and mud before washing.

(c) *Washing.* Spread the belt, haversack, etc., on a clean board or rock and apply the soap solution with a scrub brush. When a good lather appears, wash off with clear water.

In the case of a bad grease spot the direct application of soap to the brush will ordinarily be sufficient to remove it.

(d) *Drying.* Always dry washed equipment in the shade. The sun will bleach the fabric.

On return from a march in the rain, dry the equipment in the shade, if practicable.

Shelter tent. The shelter tent is cleaned and cared for as prescribed above for the cloth equipment.

When practicable always dry your shelter tent before folding and packing it. (Author)

MESS OUTFIT

Knife. The knife blade is made of tempered steel, and when put away for a long period should be covered with a light coating of oil to prevent rust.

Keep your knife clean by washing in soap and water after every meal.

Do not use the blade as a pry.

If the point is broken, grind the blade down to a new point.

Fork. Keep your fork clean by washing with hot water and soap after every meal.

Never use the prongs of your fork for prying open tops of cans, extracting corks, etc.

Don't permit your knife, fork or spoon to remain in vinegar or other foodstuffs for a long period, as verdigris will form. This corrodes the metal and is poisonous.

Spoon. Keep your spoon clean by washing with soap and water after every meal.

Meat can. Do not carry meat of any kind or other greasy substance in the meat can for a long period, as it will corrode the aluminum.

If the rivets securing the hinge to the meat can become loose, a few blows with a hammer or hand ax on the outside ends of the rivets, the heads of the rivets being backed up on a piece of metal, will tighten them.

If the hinge pin becomes loose, a nail can be used to replace it, the nail being cut with a service wire cutter and the ends of the nail headed over slightly with a few blows of a hammer.

Bacon can. The interior of the bacon can should always be kept clean and free from hardened grease or dirt by frequent washings with soap and water.

If the cover becomes loose on the body of the can, the upper half of the body may be bent out until the cover is again tight.

If the cover is too tight, a slight amount of flattening with a hammer on the edge of the cover, resting on a wooden block, will usually extend the cover sufficiently.

Condiment can. When not in use, always remove the contents. Many cans have been ruined by neglecting to do this.

See that the threaded ends do not become rusty.

The can should be disassembled at all inspections, so that the inspecting officer may see that no rust is present.

Cup. The cup is made of aluminum and excessive heat damages aluminum.

In using the cup for cooking never allow the contents to evaporate entirely. In other words, never hold an empty cup over a fire.

Keep your cup clean with hot water and soap,—preferably H & H soap.

Canteen. Although as a rule, only soap and water should be used in cleaning aluminum, a little sand can be used to advantage in cleaning the canteen.

Particular attention must be taken to see that canteens are properly cleaned after they have been filled with coffee, milk or any other fluid containing organic matter.

Being made of aluminum the canteen is easily dented, and care must be taken to prevent this.

When not actually in use the canteen should habitually be emptied and the cup left off to dry.

INTRENCHING TOOLS

Pick mattock. If the blade of the mattock is deformed, it should be straightened in a vise.

In the field, cracked handles of pick mattocks, shovels, and hand axes should be wrapped with cord.

Shovel. Do not use the side edges of the shovel blade as a mattock, for this will deform the blade.

If the blade becomes bent, straighten it with a hammer on a block of wood.

Keep your intrenching tool free from rust, being especially careful that no rust gets into the sockets.

LEATHER EQUIPMENT

General. Because of the value of leather equipment and its rapid deterioration if neglected, the proper care of leather is most important.

Materials. Two agents are necessary to the proper cleaning of leather,—a *cleaning agent* and an *oiling agent*.

The *cleaning agent* issued by the Ordnance Department is castile soap; the *oiling agents* are neat's-foot oil and harness soap.¹

The soap cleans the surface of the leather, and removes from the surface pores of the leather, dirt, sweat, and other foreign matter, so that the oil can more readily penetrate the pores and saturate the fibers, thus making the leather pliable and elastic.

Cleaning. Daily, or as often as used, leather equipment should be wiped off with a cloth slightly dampened

¹ Probert's Harness Soap is excellent. However, since the European War its issue has been discontinued by the Ordnance Department. "Viscol," obtainable from the post exchange, is the best oil for softening all kinds of leather that the author knows of.

in water, merely to remove mud, dust or other foreign substances.

This daily care will do much to maintain the appearance of the equipment, but it is, however, insufficient of itself to properly preserve it.

Leather should never be cleaned by immersing in water or holding under a hydrant.

At intervals of from one to four weeks, depending upon the circumstances, it is essential that the equipment be thoroughly cleaned in accordance with the following instructions:

(a) Separate all parts, unbuckle straps, remove all buckles, loops, etc., where possible.

(b) Wipe off all surface dust and mud with a damp (not wet) sponge. After rinsing out the sponge, a lather is made by moistening the sponge in clear water, squeezing it out until nearly dry, and rubbing it vigorously upon castile soap. When a thick, creamy lather is obtained, thoroughly clean each piece of the equipment without neglecting any portion. Each strap should be drawn its entire length through the lathered sponge so as to actually remove the salt, sweat, and dirt from each leather piece.

(c) After again rinsing the sponge make a thick lather as described above with the saddle soap. Go over each separate piece, thoroughly working the lather well into every part of the equipment, remembering that its action is that of a dressing.

(d) After the leather has been allowed to become partially dry, it should be rubbed vigorously with a soft cloth to give it the neat, healthy appearance that is desired.

Oiling. If the foregoing instructions have been carefully followed, the appearance should now be perfect, and if the leather is soft and pliable nothing further is required. It will be found, however, that it will be necessary from time to time to apply a little oil. It is not practicable, owing to different conditions of climate and service, to prescribe definitely the frequency of oiling. It has been found that during the first few months of use a set of new equipment should be given at least two applications of oil per month. Thereafter it is entirely a matter of judgment, as indicated by the appearance and pliability of the leather. Frequent, light applications are of more value than infrequent heavy applications.

New equipment. Before using, perfectly new equipment should in all cases be given a light application of neat's-foot oil; soap is unnecessary because the leather is clean. The application of oil is important because leather equipment frequently remains a considerable time in an arsenal or depot and in spite of periodical inspections and dubbing it is probably too dry for severe service.

How to apply oil. The quantity of oil to be used can not be definitely prescribed. If not enough oil is used, the leather will be stiff and brittle; if too much is used, it will soil the clothing and accumulate dirt. The leather should, therefore, be saturated with sufficient oil to be soft and pliable without excess sufficient to cause it to exude.

In applying the oil the following general instructions should govern:

(a) The oil should be applied to the flesh side of the equipment where practicable when the leather is clean and still damp after washing (about half dry), because it penetrates more uniformly when applied from the flesh side, and when the leather is damp. If the leather is dry it will absorb the oil like blotting paper, preventing proper distribution.

(b) The oil should be applied with an oiled rag or cotton waste by long, light, quick strokes—light strokes, so that the pressure applied may not squeeze out an excess of oil; quick strokes, so that the leather may not absorb an undue amount of oil. The endeavor should be to obtain a light, even distribution.

(c) After applying the oil the leather equipment should be allowed to stand for 24 hours, if practicable, in a warm dry place. It should then be rubbed with a dry cloth to remove any unabsorbed oil.

POINTS TO BE REMEMBERED

Therefore, from what has been said, the following points must be remembered:

- (a) Keep leather clean.
- (b) Keep leather pliable by frequent applications of oil.
- (c) Use only materials furnished by the Ordnance Department. *Shoe polishes*, etc., are almost invariably injurious.
- (d) *Dry all leather wet from whatever cause, in the shade*; never in the sun or close to a steam radiator, furnace, or boiler.
- (e) Leather should habitually be stored in a cool, dry place, *without artificial heat*.

CHAPTER IV

GUARD DUTY

ITS IMPORTANCE

Is guard duty considered important?

Yes; it is one of the soldier's most important duties.

How is the manner in which guard duty is performed looked upon in all armies of the world?

In all armies of the world the manner in which guard duty is performed is looked upon as an index to the discipline of the command and the manner in which other duties are performed.

Why is it that guard duty is considered so important?

Because upon the proper performance of guard duty depends not only the enforcement of military law and orders, but also the security of persons and property under the charge of sentinels.

Is the importance of guard duty increased during time of war?

Yes; for then the very safety of the Army depends upon the vigilance of the sentinels, who are required to watch that others may rest and sleep and thus refresh themselves from the labors of the day, and thereby be prepared to meet any emergency.

How may sentinels be regarded?

They may be regarded as the guardians of the repose, quiet and safety of the command.

RESPECT FOR SENTINELS

Is every one required to be respectful to sentinels?

Yes; respect for the person and office of a sentinel is as strictly enjoined by military law as that required to be paid to an officer. (Davis' Military Law.)

What does the Manual of Interior Guard Duty say on the subject?

"All persons of whatever rank in the service are required to observe respect towards sentinels and members of the guard when such are in the performance of their duty." (Par. 157)

Why is this respect for sentinels so strictly required?

Invested as the private soldier frequently is, while on his post, with a grave responsibility, it is proper and necessary that he should be fully protected in the discharge of his duty. To permit anyone, of whatever rank, to molest or interfere with him while thus employed, without becoming liable to severe penalty, would clearly establish a precedent highly prejudicial to the interests of the service. (Davis' Military Law.)

DUTY OF SENTINELS

With respect to the duties with which a sentinel is charged whom does he represent?

He represents the commanding officer, whose orders he is required to enforce on or in the vicinity of his post. (Davis' Military Law.)

What authority has a sentinel over military persons?

He has absolute authority over them, and disobedience of a sentinel's orders on the part of military persons constitutes a most serious offense and is prejudicial in the highest degree to the interests of discipline. (Davis' Military Law.)

ORDERS FOR SENTINELS

(The numbers following the paragraphs are the paragraph numbers of the Manual of Interior Guard Duty, Edition, 1914.)

Into what two classes are orders for sentinels divided?

General Orders and Special Orders. (155)

What are General Orders?

General Orders are those that apply to all sentinels in the Army (155) and they are prescribed by the War Department. (Author)

What are Special Orders?

Special Orders are those that apply to particular posts and duties (155) and are prescribed by the commanding officer. (Author)

What are the General Orders of a sentinel?

Sentinels are required to memorize the following:

My General Orders are:

1. To take charge of this post and all Government property in view.
2. To walk my post in a military manner, keeping always on the alert and observing everything that takes place within sight or hearing.
3. To report all violations of orders I am instructed to enforce.
4. To repeat all calls from posts more distant from the guardhouse than my own.
5. To quit my post only when properly relieved.
6. To receive, obey, and pass on to the sentinel who relieves me all orders from the commanding officer, officer of the day, and officers and noncommissioned officers of the guard only.

7. To talk to no one except in line of duty.
8. In case of fire or disorder to give the alarm.
9. To allow no one to commit a nuisance on or near my post.
10. In any case not covered by instructions to call the corporal of the guard.
11. To salute all officers, and all colors and standards not cased.
12. To be especially watchful at night, and, during the time for challenging, to challenge all persons on or near my post, and to allow no one to pass without proper authority. (156)

**REGULATIONS RELATING TO THE GENERAL ORDERS
FOR SENTINELS**

(No. 1. To take charge of this post and all Government property in view.)

What should a sentinel do in case he should notice anything unusual or suspicious?

He should at once call the corporal of the guard and report the facts to him. (158)

What should a sentinel do with—

- (a) Suspicious persons prowling about the post or camp at any time;
- (b) Parties to a disorder occurring on or near his post;
- (c) Unauthorized persons who attempt to enter camp at night?

He should arrest them and turn them over to the corporal of the guard. (159)

What always forms a part of the special orders of a sentinel?

The number, limits and extent of his post. (160)

What do you mean by the limits of a sentinel's post?

Every place to which he is required to go in the performance of his duties. (160)

What do you mean by the extent of a sentinel's post?

The points between which his post extends,—it's the length of his post. (Author)

What do you mean by taking charge of a post and all Government property in view?

A sentinel on post represents the Government, and he is placed there to look after its interest. A sentinel's post is not merely the line on which he actually walks, but it extends to the next posts on either end, whether or not he is required to walk the entire length of the post. Not only is the sentinel required to look after all property on his post, but he is also required to see that all Government property in the immediate neighborhood suffers no injury of any kind. (Author)

(No. 2. To walk my post in a military manner, keeping always on the alert and observing everything that takes place within sight or hearing.)

Upon reaching the end of his post is a sentinel required to halt and change the position of his rifle, or to execute to the rear, march, precisely as prescribed in the drill regulations?

No; he faces about while walking, in the manner most convenient to him. (161)

Must a sentinel always go to the end of his post before turning?

No; he may turn at any part of his post as may be best suited to the proper performance of his duty. (161)

How may a sentinel carry his rifle?

On either shoulder and in wet or severe weather, when not in a sentry box, he may carry it at a secure. (161)

How do sentinels stand in sentry boxes?

At ease. (162)

When are sentry boxes used?

Only in wet weather, or at other times when specially authorized by the commanding officer. (162)

May sentinels ever stand at ease on their posts?

Yes; in very hot weather, provided they can in this position effectively discharge their duties. However, they will never take advantage of this privilege without express authority of the commander of the guard or the officer of the day. (163)

May a mounted sentinel dismount?

He may dismount occasionally and lead his horse, but he will not relax his vigilance. (164)

What do you mean by, To walk my post in a military manner?

To walk my post in a military manner, means to maintain the bearing and appearance of a soldier, keeping the uniform orderly and clean and avoiding careless or slouchy movements. The reason for this is that a sentinel on post usually occupies a position where he is generally seen by the officers and soldiers of his own organization as well as by those of others and by civilians,

and under such conditions, a sentinel's walking his post in a careless and slouchy manner would be an unmilitary performance that would naturally create a most unfavorable impression, even, in some cases, to the extent of bringing scorn and discredit upon the entire command. (Author)

What is meant by, On the Alert?

On the alert, means on the lookout or watch against attack or danger; ready to act, and Keeping constantly on the alert, observing everything that takes place within sight or hearing, means that the sentinel shall keep his mind all the time upon his duty and not fall into any day-dreams. In this manner he may often observe things that would otherwise pass unnoticed, and though they may seem to him to have no bearing upon his duty, yet from the answers of an alert sentinel an officer may sometimes obtain valuable information. (Author)

(No. 3. To report all violations of orders I am instructed to enforce.)

As a rule when does a sentinel report a violation of orders?

When he is inspected or relieved, but if the case be urgent he will call the corporal of the guard, and also, if necessary, he will arrest the offender. (165)

(No. 4. To repeat all calls from posts more distant from the guardhouse than my own.)

How does a sentinel call the corporal of the guard for any other purpose than relief?

"Corporal of the guard, No. (—)," adding the number of his post. (166)

Should a sentinel, after calling the corporal of the guard, ever call, Never mind the corporal?

In no case will a sentinel ever call, **Never mind the corporal**, nor will the corporal pay any attention to such a call, if given. (166)

(The reason for this is that a person may overpower a sentinel after he has called for the corporal of the guard, and then compel him to call, **Never mind the corporal**, or the person himself may call, **Never mind the corporal**.—Author)

(No. 5. To quit my post only when properly relieved.)

If, by reason of sickness or other cause, it becomes necessary for a sentinel to call for relief, how does he do so?

"Corporal of the guard, No. (—), Relief," giving the number of his post. (167)

If a sentinel is to be relieved, what does he do on the approach of the relief?

When the relief is thirty paces from him, he halts and faces toward the relief with arms at right shoulder. He comes to port arms with the new sentinel, and in a low tone repeats to him all the special orders relating to the post and any other information which will assist him to better perform his duties. (168) At the command **Post**, both sentinels resume the right shoulder, face toward the new corporal and step back so as to allow the relief to pass in front of them. The new corporal then commands, **1. Forward, 2. March**; the old sentinel takes his place in rear of the relief as it passes him, his piece in the same position as those of the relief. The new

sentinel stands fast at right shoulder until the relief has passed six paces beyond him, when he begins to walk his post. (111)

What do you mean by post?

The word **post** includes the whole extent of ground specially pointed out to a sentinel as the limits of his walk as a sentinel. (Dudley's Military Law.)

What is meant by Quitting post?

It means *leaving* and being off post any material distance. (Dudley's Military Law.)

What is the meaning of Properly relieved?

Properly relieved means to be relieved by someone who has the authority to relieve a sentinel, that is to say, the commanding officer, the officer of the day, an officer, or noncommissioned officer of the guard only. (Author)

What is the punishment for a sentinel leaving his post before being properly relieved?

In time of peace he may suffer such punishment, except death, as a court-martial may direct. In time of war he may suffer death. (39th Article of War.)

(No. 6. To receive, obey, and pass on to the sentinel who relieves me, all orders from the commanding officer, officer of the day and officers, and noncommissioned officers of the guard only.)

During his tour of duty to whose orders is a member of the guard subject?

The orders of the commanding officer, officer of the day, and officers and noncommissioned officers of the guard only. (169)

May any officer investigate violations or regulations by members of the guard?

Yes; any officer may do so. (169)

Should an officer other than one authorized to give orders to sentinels, give directions to a sentinel, what should the sentinel do?

Immediately call the corporal of the guard and report the facts to him. (Author)

Should a sentinel ever quit his piece?

Only on an explicit order from the commanding officer, officer of the day, an officer or noncommissioned officer of the guard. Under no circumstances should he ever yield it to anyone else. (170)

(Note: Unless necessity therefore exists, no person should require a sentinel to quit his piece, even to inspect it.—170)

What is a Countersign?

It is a word given from the headquarters of a command to aid guards and sentinels in identifying persons who may be authorized to pass at night. (210)

To whom may a sentinel divulge the countersign?

He will divulge the countersign to no one except the sentinel who relieves him, or to a person from whom he properly receives orders, on such person's verbal order given personally. (171)

What is the punishment for divulging the countersign to a person not authorized to receive it?

In time of war it may be death or such other punishment as a court-martial may direct. (44th Article of War.)

Are privates of the guard allowed to use the countersign when not posted as sentinels?

No; they are strictly forbidden to do so. They are authorized to use the countersign only in the performance of their duties while posted as sentinels. (171)

(No. 7. To talk to no one except in the line of duty.)

When calling for any purpose, challenging or holding communication with any person, what position should a dismounted sentinel armed with a rifle or saber, take?

He should take the position of "port" arms or saber. (172)

At night what position should a dismounted sentinel, armed with a pistol, take in challenging or holding communication?

The position of raise pistol. (172)

Does a mounted sentinel ordinarily draw his weapon in the day time when challenging or holding conversation?

No; he does not, but if already drawn he holds the weapon at advance rifle, raise pistol, or port saber, depending on which weapon he is armed with. (172)

Does a mounted sentinel draw his weapon at night when challenging or holding conversation?

Yes; he draws his weapon and holds it as prescribed above, depending on whether he is armed with a rifle, pistol or saber. (172)

(No. 8. In case of fire or disorder to give the alarm.)

What should a sentinel, except the one at the post of the guard, do in case of fire?

Call, "Fire, No. (—)," adding the number of his post. If possible he will extinguish the fire himself. If the danger be great he will discharge his piece *before* calling. (173)

(Note. The piece is fired *before*, and not *after*, calling so as to fix the attention of anyone within ear-shot. The firing of a shot naturally fixes the attention of anyone hearing it, and such a person would then be sure to hear any call that might follow.—Author)

What should be done in the case of a fire in a stable?

First, the proper alarm given; then, the door toward the wind closed, immediately after which the sentinel should begin to take the horses out, commencing with those nearest the fire. If the fire is not burning fast, the horses are turned into one of the corrals, not near the fire, or they are tied to the picket line; for, if merely turned loose they are liable to run back into the fire. If a horse refuses to lead out or away from the fire his head should be covered with a sack, coat or something else and he should then be led out. If the fire is making such headway that there is not time to take the horses out, the sentinel should then merely loosen them all and trust to their getting out. (Author)

What should a sentinel, except the one at the post of the guard, do in case of disorder?

Call, "The Guard, No. (—)," adding the number of his post. If the danger be great, he will discharge his piece *before* calling. (173)

What do you mean by, Disorder?

A disorder is a disturbance, or breach of public order of any kind, such as loud and boisterous conduct on the part of drunken men; or two or more men fighting or otherwise misbehaving themselves. (Author)

(No. 9. To allow no one to commit a nuisance on or near my post.)

What is meant by, Nuisance?

Nuisance means anything that is disagreeable or offensive, such as urinating, etc. (Author)

(No. 11. To salute all officers and all colors and standards not cased.)

Do sentinels salute all officers?

Yes; when not engaged in the performance of a specific duty, the proper execution of which would prevent it, a sentinel will salute all officers who pass him. (174)

Does this rule apply at all hours of the day or night?

Yes. (Except in case of mounted sentinels armed with a rifle or pistol, or dismounted sentinels armed with a pistol, after challenging. This is explained later.—174)

What form of salute does a dismounted sentinel use?

If armed with a rifle or saber, he salutes with the present; if otherwise armed, he salutes with his right hand. (175)

What form of salute does a mounted sentinel use?

A mounted sentinel, if armed with a saber and the saber be drawn, salutes by presenting saber; otherwise he salutes in all cases with the right hand. (175)

Explain in detail how a dismounted sentinel salutes.

With piece at right shoulder or saber at carry, the sentinel halts and faces toward the person to be saluted when the latter arrives within thirty paces. If the person approaches along the sentinel's post, the salute is rendered when he arrives at a point six paces from the sentinel. (176)

If the person crosses the sentinel's post, he is saluted just before reaching the post. (Author)

Does a sentinel salute an officer who crosses his post, but does not pass within thirty paces of the sentinel?

Yes, he does. (Decision A. G. O., July 21, 1906.)

If he is approaching the sentinel on a line that does not cross his post, he is saluted just before crossing the sentinel's front. (Author)

What is saluting distance assumed to be, and why?

Thirty paces, because this is supposed to be the distance within which insignia can be readily recognized. (176)

Suppose an officer approaches within 30 paces, but does not come within six paces of the sentinel, when is he saluted?

When he reaches the nearest point. (177)

How long does a sentinel remain at the present?

Until his salute is returned or until the person saluted has passed. (Author)

When does the sentinel resume walking his post?

When the person saluted has passed about six paces beyond him. (Author)

What are Colors and Standards and when are they Cased?

Colors are the national flag and the regimental flag carried by the Infantry and other foot troops.

Standards are the national flag and the regimental flag carried by the Cavalry and Field Artillery; they are smaller than those carried by the Infantry.

Colors and *Standards* are *Cased* when they are rolled and covered with a water-proof case. (Author)

What does a sentinel in a sentry box, armed with the rifle, do on the approach of a person or party entitled to salute?

He stands at attention at an order and salutes by presenting arms in accordance with foregoing rules. (178)

What does a sentinel do if armed with a saber?

He stands at the carry and salutes as before stated. (178)

How does a mounted sentinel on a regular post salute?

He halts, faces and salutes in accordance with the foregoing rules. (179)

How does a mounted sentinel doing patrol duty salute?

He salutes as before stated, but does not halt unless spoken to. (179)

Who are entitled to salutes from sentinels?

All persons entitled to compliments from the guard (Par. 224, Manual of Interior Guard Duty); officers of the Army, Navy, and Marine Corps; military and naval officers of foreign powers; officers of volunteers, and militia officers when in uniform. (180)

Are sentinels required to memorize the list of persons given in Par. 224, Manual of Interior Guard Duty, who are entitled to compliments from the guard?

No; they are not. Except in the case of general officers of the Army, they will be notified of the presence in camp or garrison of persons entitled to compliments from the guard. (226)

Does a sentinel salute the remains of a deceased officer or soldier?

Yes; provided they pass within saluting distance. (180 and 228)

If an officer has been holding communication with a sentinel, what should the sentinel do when the officer leaves?

He should salute. (181)

When should he salute?

The very moment the officer makes the first move to go. (Author)

During the hours when challenging is prescribed, when is an officer saluted?

As soon as he has been duly recognized and advanced. (181)

Does a mounted sentinel armed with a rifle or pistol, or a dismounted sentinel armed with the pistol, salute after challenging?

No; he does not. He stands at the advance rifle or raise pistol until the officer passes. (181)

What does a sentinel do in case of the approach of an armed party of the guard?

He halts when it is about thirty paces from him, facing towards the party, with his piece at the right shoul-

der. If not himself relieved he will, as the party passes, place himself so that it will pass in front of him. (182)

When does he resume walking his post?

When the party has passed six paces beyond him. (182)

Is an officer entitled to the salute if not in uniform?

Yes; an officer is entitled to salute whether in uniform or not. (183)

Should a sentinel in communication with an officer interrupt the conversation to salute?

No; he should not. In case the officer approaching is senior to the officer speaking to the sentinel, the officer talking salutes the superior, whereupon the sentinel also salutes. (184)

When the flag is lowered at retreat what should a sentinel on post and in view of the flag, do?

He should face the flag, and, at the first note of "The Star Spangled Banner," or to the color, come to the present and retain this position until the sounding of the last note, when he resumes walking his post. (185)

When The Star Spangled Banner is played at a military post on an occasion other than retreat, or at any other place, what should sentinels on post in the vicinity do?

If their duties do not prevent, they will face the music and come to the present at the first note of "The Star Spangled Banner," retaining this position until the sounding of the last note, when they resume walking post. (A. R. 378 and Cir. 87/09.)

When the flag is hoisted at guard mounting on board a transport, what do sentinels on post in the vicinity of the ceremony do?

They salute the same as at retreat. (Cir. 87/'09.)

(No. 12. To be especially watchful at night and during the time for challenging, challenge all persons on or near my post, and to allow no one to pass without proper authority.)

During challenging hours, what should a sentinel do if he should see any person or party on or near his post?

He should advance rapidly along his post toward such person or party and when within about thirty yards challenge sharply, "HALT. Who is there?" The sentinel will take care to place himself in the best position to receive or, if necessary, to arrest the person or party. (186)

How is a mounted party challenged?

"HALT. DISMOUNT. Who is there?" (187)

If a sentinel should challenge a party of two or more persons, how many should he permit to approach him to give the countersign, or (if no countersign be used) to be recognized?

He should permit only one to approach him. (188)

What does the sentinel then do?

After having advanced and recognized one of the party, the whole party is then advanced, that is, allowed to pass. (188)

How is a party of two or more in a carriage or automobile challenged and advanced?

"HALT. Who is there?" and after receiving an answer, adding, "Dismount one and advance to be

recognized." If the headlights (not sidelights) are on, the sentinel after calling "Halt," will immediately add, "Turn off your headlights." (Author)

How is a person on a bicycle or motorcycle challenged and advanced?

"HALT. DISMOUNT. Turn your lights the other way. Who is there?" (Author)

(Note. The sentinel gives the directions indicated in the case of lights, so that they may not be suddenly flashed in his face for the purpose of blinding him.)

What must a sentinel always do before permitting anyone to pass his post?

He must satisfy himself beyond doubt that the person is what he represents himself to be and has a right to pass. (189)

If not satisfied about the identity of the person or his right to pass, what should the sentinel do?

Caution the person to stand and then call the corporal of the guard. (189)

If the sentinel has no authority to pass persons with the countersign, but some present themselves with one; or if a party, not known to the sentinel, who is supposed to have the countersign hasn't got it, or gives an incorrect one, what should the sentinel do?

He cautions them to stand and then calls the corporal of the guard. (189)

How near should a sentinel permit a person to approach before recognizing such person or receiving the countersign?

He should not permit anyone to approach so close as to prevent the proper use of his weapon before recognizing the person or receiving the countersign. (190)

If two or more persons approach in one party and the sentinel upon challenging them receives an answer indicating that they have the countersign, how does he advance them?

Having received an answer to his challenge, he will say, "Advance one with the countersign," and, upon receiving the countersign will then say, "Advance (so and so)," repeating the answer to his challenge. (191)

Illustrate with relief.

Sentinel: "HALT. Who is there?"

Answer by one of party: Relief.

Sentinel: "Advance one with the countersign."

Sentinel (after recognizing him): "Advance relief." (191)

Illustrate how a single person having the countersign is advanced.

Sentinel: "HALT. Who is there?"

Answer: Friend with the countersign (or officer of the day, or etc.).

Sentinel: "Advance, friend with the countersign" (or officer of the day, or etc.), and then, "Advance, friend" (or officer of the day, or etc.). (192)

If a party is already advanced and is in communication with the sentinel, what should the sentinel do if one or more other parties should approach?

He will, without regard to the officer to whom he is talking, at once challenge the approaching party or parties in succession. If any of the parties challenged be senior to the one already advanced, the sentinel will advance the senior. Otherwise, the sentinel will not advance any of them until the senior, who has already been advanced, allows him to do so, or leaves his post. He

will then advance the senior only of the remaining parties, and so on. (194)

Should a sentinel who has advanced a junior and a senior, speak to the junior while the senior is still on his post?

He should first get the permission of the senior before addressing the junior. (Author)

What order of rank should be observed in advancing different persons?

1. Commanding officer.
2. Officer of the Day.
3. Officer of the Guard.
4. Officers.
5. Patrols.
6. Reliefs.
7. Noncommissioned officers of the guard, in order of rank.

8. Friends. (195)

Should a sentinel ever allow himself to be surprised?

Under no circumstances should a sentinel ever allow himself to be surprised. (196) Such an occurrence would show great lack of alertness, for which the sentinel would be punished. (Author)

Should a sentinel ever allow two or more parties to advance upon him at the same time?

No; in no case should he allow it. (196)

If no countersign is used, in what way are the rules for advancing parties changed?

Instead of saying, "Advance (so and so) with the countersign," the sentinel says, "Advance (so and so) to be recognized." Upon recognition he says, "Advance (so and so)." (197)

Should confusing or misleading answers to challenges ever be used?

No; the use of such answers is expressly forbidden.
(198)

**SPECIAL ORDERS FOR SENTINELS AT THE POST OF
THE GUARD**

What orders are sentinels at the post of the guard required to memorize?

Between reveille and retreat to turn out the guard for all persons designated by the commanding officer, for all colors or standards not cased, and in time of war for all armed parties approaching my post, except troops at drill and reliefs and detachments of the guard.

At night, after challenging any person or party, to advance no one but call the corporal of the guard, repeating the answer to the challenge. (199)

*What is meant by **Between reveille and retreat**?*

It is the interval between the firing of the morning and evening gun; or if no gun is fired, it is the interval between the sounding of the first note of the reveille, or the first march if marches be played, and the last note of retreat. (Par. 274, Manual of Guard Duty, 1908.)

After receiving an answer to his challenge, what does No. 1^a do?

He calls, "Corporal of the guard, (so and so)," repeating the answer to the challenge. (200)

How long does he remain in the position assumed in challenging?

Until the corporal has recognized or advanced the person or party challenged.

* The number of the post at the post of the guard is always One, and the sentinel thereon is referred to as "No. 1."

CHALLENGE TABLE

CHALLENGE	ANSWER	SENTINEL'S ORDER	REMARKS
Who is there?	1. Friend, officer, member of the garrison, member of the guard, or any other answer indicating only one person, who is not supposed to have the countersign.	1. ADVANCE (So and so), <i>(repeating the answer to the challenge)</i> TO BE RECOGNIZED <i>(And after recognition)</i> ADVANCE (So and so) <i>(repeating the answer to the challenge)</i> .	If the person is not recognized, call the Corporal of the Guard.
HALT!			
Who is there?	2. Friends, officers, members of the garrison, members of the guard, or any other answer indicating more than one person, who are not supposed to have the countersign.	2. ADVANCE ONE TO BE RECOGNIZED <i>(And after recognition)</i> ADVANCE (So and so) <i>(repeating the answer to the challenge)</i> .	(Note: The uniform of an officer would ordinarily identify him as an officer, friend, or member of the garrison.)
(If party challenged be mounted.)	3. Commanding officer, Officer of the Day, Officer of the Guard, Commander of the Guard, Sergeant of the Guard, Corporal of the Guard, friend with the countersign, or any other answer indicating only one person who is supposed to have the countersign.	3. ADVANCE (So and so) <i>(repeating the answer to the challenge)</i> WITH THE COUNTERSIGN. <i>(And after the countersign has been given)</i> ADVANCE (so and so) <i>(repeating the answer to the challenge)</i> .	If the wrong countersign is given, or if a person who is supposed to have the countersign can not give it and if he is not recognised by the sentinel, call the Corporal of the Guard.
HALT!			
DISMOUNT;	4. Relief, patrol, or any other answer, indicating more than one person who are supposed to have the countersign.	4. ADVANCE ONE WITH THE COUNTERSIGN. <i>(And after the countersign has been given)</i> ADVANCE (So and so) <i>(repeating the answer to the challenge)</i> .	If the person is entitled to the salute, present arms immediately after advancing him. If the person has a drawn sabre, revolver, or other weapon, order him to return it before finally advancing him.
Who is there?			In case of attack or hostile demonstration, discharge your piece and call "The Guard, No. —."

What does No. 1 then do?

He resumes walking his post; or, if the person or party advanced be entitled to a salute, he salutes, and as soon as his salute has been acknowledged, he resumes walking his post. (201)

Illustrate by a few examples the manner of turning out the guard.

Turn out the guard—

Commanding officer,	Armed party,
Governor of a territory,	Secretary of War, (203)
National colors,	General officer. (Author)

What does No. 1 call at the approach of the new guard at guard mounting?

"Turn out the guard, armed party." (203)

If the person named by the sentinel does not desire the guard turned out, what does such person do?

He salutes, whereupon No. 1 will call, **"Never mind the guard." (204)**

After having called, Turn out the guard, in the case of the approach of an armed party, should No. 1 ever call, Never mind the guard?

No; never. (205)

Suppose the guard is already turned out and formed, what should No. 1 do upon the approach of a person entitled to have the guard turned out?

He will nevertheless call, **"Turn out the guard,"** except that the guard will not be turned out for any person while his senior is at or coming to the post of the guard. (206)

If two or more persons entitled to have the guard turned out should approach at the same time, what should No. 1 do?

He would turn out the guard for the senior only.
(206)

If the senior did not wish to have the guard turned out, would No. 1 then turn it out for the next in rank?

No; he would not, for the guard is never turned out for a junior while a senior is at or coming to the post of the guard. (206)

What should the sentinels at the post of the guard do in the case of the approach of any armed body and in the case of the presence in the vicinity of any suspicious or disorderly persons?

They will at once warn the commander of the guard.
(207)

What does No. 1 do in case of fire or disorder in sight or hearing?

He will call the corporal of the guard and report the facts to him. (208)

Is the guard turned out when the remains of a deceased officer or soldier are carried past?

Yes; the guard turns out and presents arms. (228)

How does No. 1 turn out the guard for the remains of a deceased officer or soldier?

"Turn out the guard, remains of deceased officer (or soldier)." (Author)

Is the guard turned out for the national or regimental color if the party carrying it is at drill?

Yes; but if the drill is conducted in the vicinity of the guardhouse, the guard will be turned out when the colors first pass, and not thereafter. (227)

Who has charge of the prisoners at the post of the guard?

No. 1, except when they have been turned over to the prison guard or overseers. (299)

What are No. 1's orders regarding prisoners?

(a) He will allow none to escape.

(b) He will allow none to cross his post leaving the guardhouse except when passed by an officer or non-commissioned officer of the guard.

(c) He will allow no one to communicate with prisoners without permission from proper authority.

(d) He will promptly report to the corporal of the guard any suspicious noise made by the prisoners.

(e) He will be prepared to tell whenever asked how many prisoners are in the guardhouse and how many are out at work or elsewhere. (299)

Whenever prisoners are brought to his post returning from work or elsewhere, what should No. 1 do?

Halt them and call the corporal of the guard, notifying him of the number of prisoners returning. Thus: "Corporal of the guard, (so many) prisoners." (299)

ORDERS FOR SENTINELS IN CHARGE OF PRISONERS

If a prisoner attempts to escape, what should the sentinel do?

He should call, "Halt." (305)

What should be done, if the prisoner fails to halt?

The sentinel will repeat, "Halt." (305)

Suppose the prisoner should still fail to halt, what should the sentinel do?

If there is no other possible means of preventing his escape, the sentry will fire upon him. (305)

Should the sentinel fire to hit?

Yes; if the prisoner does not pay any attention to the command to halt, the sentinel must fire to maim, or even kill, and the failure to fire with this intent is a serious military offense. (Page 64, Manual of Interior Guard Duty.)

What is the punishment for a sentinel who allows a prisoner to escape?

In time of war, any punishment, except death, that a court-martial may direct. In time of peace the greatest punishment is confinement at hard labor for six months and forfeiture of two-thirds pay for the same period. If a sentinel willfully allows a prisoner to escape, he may be dishonorably discharged, forfeiting all pay and allowances, and be confined at hard labor for one year. (Manual for Courts-Martial.)

On approaching the post of the sentinel at the guard-house, what should a sentinel in charge of prisoners do?

He will halt his prisoners and call, "No. 1, (so many) prisoners," and he will not allow them to cross the post of the sentinel until so directed by the corporal of the guard. (306)

Are sentinels who are placed over prisoners at work responsible that the prisoners shall perform the work properly and satisfactorily?

Yes; they are held strictly responsible. (307)

How should a sentinel always stand with respect to his prisoners?

He must always keep them in front of him, and never allow them to walk at his side or in his rear. (Author)

Should he at any time lose sight of them?

No; never. (Author)

What does a sentinel in charge of prisoners do, when an officer approaches, or when the sentinel approaches an officer?

When within six paces of the officer, he will salute with the rifle, taking care to keep his prisoners constantly in front of him. (Author)

MUSICIANS OF THE GUARD

What are the duties of the musicians about sounding calls?

They sound all calls prescribed by the commanding officer, at such times and places as may be directed. (138 and Author)

Should the guard be turned out for national or regimental colors or standards, not cased, what do the musicians do?

When the guard presents arms, the field music sounds, **To the colors** or **To the standard**. (139)

When the guard is turned out as a compliment to a person entitled to the march, flourishes or ruffles, what does the field music do?

When the guard presents arms, the field music sounds off as follows:

For the President—the President's March.

For a General—the General's March.

For a Lieutenant General—three flourishes.

For a Major General—two flourishes.

For a Brigadier General—one flourish.

(Note. For others entitled to the march, flourishes and ruffles, see Par. 376, Army regulations.)

Where do the musicians remain during their tour of duty?

Unless otherwise directed by the commanding officer, they remain at the guardhouse and fall in with the guard when it is formed. (Author)

They form on a line with the front rank of the guard, their left three paces from the right guide. (360)

Where do the musicians of the guard sleep?

They sleep at the guardhouse, unless otherwise directed by commanding officer. (Author)

ORDERLIES

When directed by the commander of the guard to fall out and report, what does the orderly do?

He will give his name, company and regiment to the sergeant of the guard, and, leaving his rifle in the arm-rack in his company quarters, will proceed at once to the officer to whom assigned to report to him. (142)

How does he report?

He will salute the officer and say, "Sir, Private —, Company —, reports as orderly." (142)

(Note. If more than one regiment (or if parts of more than one regiment) are serving at the post, the orderly will report, for instance, "Sir, Private Smith, Troop A, 1st Cavalry, reports as orderly."—Author)

If the orderly be a cavalryman, does he report with side arms?

He will report with his belt on, but without side-arms, unless specially otherwise ordered. (143)

When the orderly reports, what does the commanding officer usually say to him?

"Relieve the old orderly," whereupon the new orderly replies, "Yes, sir," and then faces about and leaves the office. (Author)

Should the new orderly always be sure to get all instructions from the old orderly?

Yes; he should. (Author)

To whose orders is the orderly subject?

Only to the orders of the commanding officer and of the officers to whom they are ordered to report. (144)

When ordered to carry a message, what should an orderly be careful to do?

He will be careful to deliver it exactly as it was given him. (145)

If he does not understand a message given him for delivery, or any instructions that he may receive, what should he do?

Ask the officer to repeat them. For example: "Sir, the orderly does not understand; will the commanding officer (or the captain) please repeat the message or his instructions?" (Author)

How does an orderly acknowledge the receipt of orders, messages and instructions?

By saluting and saying, "Yes, sir." (Author)

What should an orderly always do after having delivered a message or returned from an errand?

He will always report accordingly to the officer. For example, "Sir, the commanding officer's message has been delivered to Captain Smith." (Author)

When does an orderly's tour of duty end?

When he is relieved by the new orderly. (146)

Is an orderly a member of the guard?

Yes; and his name, company, and regiment are entered on the guard report and lists of the guard. (147)

Where does the commanding officer's orderly sleep?

In his company quarters, or such other place as may be designated by the commanding officer. (Author)

Does the orderly, when called, knock before entering the commanding officer's office?

No; it is a custom of the service for him to enter without knocking. (Author)

Should an orderly always turn over all his orders and instructions to his successor?

Yes; he must be sure to do so. (Author)

What is it customary for an orderly to do at mess call?

If in attendance on an officer, it is customary to report, "Sir, mess call has sounded," whereupon the officer generally says, "Go to your mess." (Author)

If a sentinel is relieved at a certain hour daily, what should he do when the hour arrives?

Report to the officer, "Sir, it is — o'clock." (Author)

ORDERS FOR COLOR SENTINELS

(Sentinels posted on the color line)

Where do color sentinels sleep?

In their company barracks. (Author)

When are they required to report to the commander of the guard?

At reveille and retreat they are required to report in person to the commander of the guard. (150) They will also report at the guardhouse and remain there during such hours as may be designated by the commanding officer. (Author)

Do they fall in, under arms, with the guard at guard mounting?

Yes; they do. (150)

How does a color sentinel call for the corporal of the guard?

"Corporal of the guard, color line." (151)

Are officers and enlisted men required to salute the colors, on the color line, if uncased, when they pass them?

Yes. (152)

When is the salute rendered?

On crossing the color line or on passing the color. (152)

Should a person crossing the color line or passing the color, fail to salute it, what should the sentinel do?

Come to a port arms and call to him, **"Salute the color."** In case of an officer, call, **"Salute the color, please."** If the caution be not heeded, the sentinel will call the corporal of the guard and report the facts to him. (153 and Author)

Will the color sentinel allow the colors to be removed?

Only in the presence of an armed escort, and unless otherwise ordered by the commanding officer, he will allow no one to touch the colors except the color bearer. (153)

Will he allow any soldier to take arms from the stacks, or to touch them?

Only by an order of an officer or noncommissioned officer of the guard. (153)

GENERAL RULES CONCERNING GUARD DUTY

May a soldier hire another to do his guard or other duty for him?

No; under no circumstances. (231)

Is drunkenness on guard considered a serious offense?

Yes; and a soldier found guilty of drunkenness on guard may, in time of peace, be sentenced to confinement at hard labor for six months and forfeiture of two-thirds of his pay for the same period. In time of war he may suffer such punishment, except death, that a court-martial may direct. (38th Article of War and Courts-Martial Manual.)

Why is the offense of drunkenness considered more serious in military law than in civil law?

Because the responsibilities of the soldier are often very great, and drunkenness not only unfits the soldier for duty and tends to ruin discipline, but, in time of war it might endanger the safety of the command. (Dudley's Military Law.)

What is meant by drunkenness,—does it mean that a man must be so "full" that he staggers?

No; not at all. A man is considered drunk if the full exercise of his mental and physical faculties is noticeably impaired by the use of liquor, opium, or any other intoxicating drug or thing. (Dudley's Military Law.)

Is sleeping on post a serious offense?

The safety of the army in time of war, and the security of persons and property under the charge of sentinels in time of peace, depend upon the watchfulness and careful performance of the duty of sentinels. The heaviest penalties, are, therefore, awarded for failure to properly perform the duties of a sentinel, and especially upon him who quits his post or is found asleep thereon. (Dudley's Military Law.)

What is the punishment for sleeping on post?

Death or such other punishment as a court-martial may direct. (39th Article of War.)

When the guard is formed what do members of the guard do?

They fall in promptly, in their proper place, under arms. (234)

When the roll is called, what does each man do?

As his name, or number and relief, are called, he answers, "**Here,**" and comes to order arms. (94 and 234)

What does a member of the guard do when his relief is formed?

At the command, "**1. (Such) relief, 2. Fall in,**" he falls in at once, in his proper place according to his number, 2, 4, 6, and so on in the front rank, and 1, 3, 5, and so on in the rear rank, or in the order of their respective posts from right to left, according as the relief is in double or single rank. At the command, "**Call off,**" commencing on the right the men call off alternately rear and front rank, **one, two, three,**

etc.; if in single rank they call off from right to left. (114)

Whenever the guard or relief is dismissed, what does each man do with his rifle?

If not required for duty, he will at once place his rifle in the arm rack (if they be provided) and will not remove it therefrom unless he requires it in the performance of some duty. (235)

Are members of the guard allowed to leave the immediate vicinity of the guardhouse?

Members of the guard, except orderlies, will not do so without permission from the commander of the guard. (236)

Are members of the guard allowed to remove their accouterments or clothing?

Members of the guard, except orderlies, will not remove their accouterments or clothing without permission from the commander of the guard. (237)

Are members of the guard forbidden to quit their guard,—that is, to go away from the guardhouse or other place of duty?

Yes; they are forbidden to do so, without permission. (40th Article of War.)

What is the punishment for such an offense?

In time of war such punishment, except death, as a court-martial may direct. In time of peace it may be confinement at hard labor for six months and forfeiture of two-thirds pay for the same period. In time of war the punishment would be much more severe. (40th Article of War and Courts-Martial Manual.)

TROOP STABLE GUARD

Do members of the stable guard attend stables with the rest of the troop and groom their own horses?

Yes; the sentinels are taken off post for the purpose. (316)

May a member of the stable guard leave the immediate vicinity of the stable?

Only by permission of the noncommissioned officer of the guard. (317)

What are the regulations regarding smoking, fires and lights in the stable?

Smoking in the stables or their immediate vicinity is prohibited. No fire or light, except electric light or stable lanterns, will be permitted in the stables. (320)

Are members of the stable guard governed by the regulations for members of the main guard?

Yes; whenever the regulations are applicable, such as courtesies to officers, walking post in a soldierly manner, challenging, etc. (328)

Do the sentinels turn out the guard?

No; not unless ordered to do so by proper authority. (328)

From whom do members of the stable guard receive orders?

From the commanding officer, the troop commander, and the noncommissioned officers of the stable guard only, except when the commanding officer directs the officer of the day to inspect the stable guard. (329)

Should the sentinel permit any horse or equipment to be taken from the stable?

No; except in the presence of the noncommissioned officer of the guard. (311)

What should a sentinel do in case a horse gets loose?

Catch him and tie him up. If he is unable to catch the horse, he will at once notify the noncommissioned officer. (332)

What should a sentinel do in case a horse be cast, or in any way entangled?

He will relieve him if possible. If unable to relieve him, he will call the noncommissioned officer. (332)

Should sentinels punish or maltreat horses?

No; they are forbidden to do so. (332)

What does a sentinel do in case a horse is taken sick?

He will notify the noncommissioned officer, who in turn will call the farrier, and see that the horse is properly attended to. (333)

What should a sentinel do in case of fire?

He will give the alarm by stepping outside of the stable and firing his pistol or piece repeatedly, and calling out at the same time, "Fire, stables, Troop (—)." (334)

What should he then do?

As soon as the guard is alarmed, he will take the necessary precautions in opening or closing the doors so as to prevent the spreading of the fire and make it possible to remove the horses; he will then drop the chains and bars, and, with the other members of the guard, proceed to lead out the horses and secure them at the picket line or such other place as may have been previously designated. (334)

From whom do sentinels over horses or in charge of prisoners, receive orders, so far as the care of the horses and the labor of the prisoners are concerned?

From the stable sergeant. (335)

In the field artillery and the machine-gun organizations what have the sentinels charge of?

The guns, caissons, etc., with their ammunition and stores, as well as the horses, harness and forage. (336)

CHAPTER V

MILITARY COURTESY

Its Importance. Some soldiers do not see the necessity for saluting, standing at attention, and other forms of courtesy, because they do not understand their significance—their object. It is a well-known fact that military courtesy is a very important part of the education of the soldier, and there are good reasons for it.



FIG. 1

General Orders No. 183, Division of the Philippines, 1901, says: "In all armies the manner in which military courtesies are observed and rendered by officers and soldiers, is the index to the manner in which other duties are performed."

The Army Regulations tells us, "Courtesy among military men is indispensable to discipline; respect to superiors will not be confined to obedience on duty, but will be extended on all occasions."

THE NATURE OF SALUTES AND THEIR ORIGIN

The Civilian Salute. When a gentleman raises his hat to a lady he is but continuing a custom that had its beginning in the days of knighthood, when every knight wore his helmet as a protection against foes. However,

when coming among friends, especially ladies, the knight would remove his helmet as a mark of confidence and trust in his friends. In those days failure to remove the helmet in the presence of ladies signified distrust and want of confidence—today it signifies impoliteness and a want of good breeding.

The Military Salute. From time immemorial subordinates have always uncovered before superiors, and equals have always acknowledged each other's presence by some courtesy—this seems to be one of the natural, nobler instincts of man. It was not so many years ago when a sentinel saluted not only with his gun but by taking off his hat also. However, when complicated headgear like the bearskin and the helmet came into use, they could not be readily removed and the act of removing the hat was finally conventionalized into the present salute—into the movement of the hand to the visor as if the hat were going to be removed.

Every once in a while a man is found who has the mistaken idea that he smothers the American spirit of freedom, that he sacrifices his independence, by saluting his officers. Of course, no one but an anarchist or a man with a small, shrivelled-up mind can have such ideas.

Manly deference to superiors, which in military life is merely recognition of constituted authority, does not imply admission of inferiority any more than respect for law implies cowardice.



FIG. 2

The recruit should at once rid himself of the idea that saluting and other forms of military courtesy are un-American. The salute is the soldier's claim from the very highest in the land to instant recognition as a soldier. The raw recruit by his simple act of saluting, commands like honor from the ranking general of the Army—aye, from even the President of the United States.



FIG. 3

While the personal element naturally enters into the salute to a certain extent, when a soldier salutes an officer he is really saluting the office rather than the officer personally—the salute is rendered as a mark of respect to the rank, the position that the officer holds, to the authority with which he is vested. A man with the true soldierly instinct never misses an opportunity to salute his officers.

As a matter of fact, military courtesy is just simply an application of common, every-day courtesy and common sense. In common, every-day courtesy no man with the instincts of a gentleman ever thinks about taking advantage of this thing and that thing in order to avoid paying to his fellow-man the ordinary, conventional courtesies of life, and if there is ever any doubt about the matter, he takes no chances but extends the courtesy. And this is just exactly what the man who has the instincts of a real soldier does in the case of military courtesy. The thought of "Should I salute or should I not salute" never enters the mind of a real soldier just because he happens to be in a wagon, in a post office, etc.

In all armies of the world, all officers and soldiers are required to salute each other whenever they meet or pass, the subordinate saluting first. The salute on the part of the subordinate is not intended in any way as an act of degradation or a mark of inferiority, but is simply a military courtesy that is as binding on the officer as it is on the private, and just as the enlisted man is required to salute the officer first, so is the officer required to salute his superiors first. It is a bond uniting all in a common profession, marking the fact that above them there is an authority that both recognize and obey—the Country! Indeed, by custom and regulations, it is as obligatory for the ranking general of the Army to return the salute of the recruit, as it is for the latter to give it.

Let it be remembered that the military salute is a form of greeting that belongs exclusively to the Government—to the soldier, the sailor, the marine—it is the mark and prerogative of the military man and he should be proud of having the privilege of using that form of salutation—a form of salutation that marks him as a member of the Profession of Arms—the profession of Napoleon, Wellington, Grant, Lee, Sherman, Jackson and scores of others of the greatest and most famous men the world has ever known. The military salute is ours, it is ours only. Moreover, it belongs only to the soldier who is in good standing, a prisoner, for instance, not being allowed to salute. Ours is a grand fraternity



FIG. 4.

of men-at-arms, banded together for national defense, for the maintenance of law and order—we are bound together by the love and respect we bear the flag—we are pledged to loyalty, to one God, one country—our lives are dedicated to the defense of our country's flag—the officer and the private belong to a brotherhood whose regalia is the uniform of the American soldier, and they are known to one another, and to all men, by an honored sign and symbol of knighthood that has come down to us from the ages—**THE MILITARY SALUTE!**

WHOM TO SALUTE

All Army officers. All Army officers are saluted by enlisted men.

Navy, Marine Corps, Volunteer and National Guard officers. Soldiers at all times and in all situations salute officers of the Navy, Marine Corps, and National Guard the same as they salute officers of the Regular Army.

Reserve Corps officers. Although the subject is not at present (March, 1917) covered by orders or regulations, it goes without saying that soldiers would salute members of the Officers' Reserve Corps *on active duty* the same as they salute their own officers.

Foreign naval and military officers. The Manual of Interior Guard Duty requires sentinels to salute foreign naval and military officers, but there are no instructions about other enlisted men saluting them.



FIG. 5

This soldier is hearing something that's "making a noise" like a Summary Court.

However, as an act of international courtesy, they should be saluted the same as our own officers.

WHEN AND HOW TO SALUTE

General rule. Day or night, covered or uncovered with headgear, whether either or both are in uniform or civilian clothes, enlisted men not in a military formation, nor at drill, work, games, or mess, salute officers whom they meet, pass near or address, or who address them.

Saluting distance. Saluting distance is that within which recognition is easy. In general, it does not exceed 30 paces.

As to the distance at which the salute should be made, the following is what has been the practice in the Army:

In approaching or passing each other within saluting distance, individuals or bodies of troops exchange salutes when at a distance of about 6 paces. If they do not approach each other that closely, the salute is exchanged at the point of nearest approach. For instance, if the officer and soldier are approaching each other on the same sidewalk, the hand is brought up to the headdress when about 6 paces from the officer. If they are on opposite sides of the street, the hand is brought up when about ten paces in advance of the officer. If the officer and soldier are not going in opposite directions and the officer does not approach within six paces, the salute is rendered when the officer reaches the nearest point to the soldier. If a soldier passes an officer from the rear, the hand is raised as he reaches the officer; if an officer passes a



FIG. 6



FIG. 7

soldier from the rear, the soldier salutes just as the officer is about to pass him.

Officer entering room occupied by soldiers. When an officer enters a room where there are several enlisted men, the word "attention" is given by some one who perceives him, when all rise, uncover, and remain standing at attention until the officer leaves the room or directs otherwise.

At meals. Enlisted men at meals stop eating and remain seated at attention when an officer enters the room.

When seated. An enlisted man, if seated, rises on the approach of an officer, faces toward him, stands at attention, and salutes. Standing he faces an officer for the same purpose. If the parties remain in the same place or on the same ground, such compliments need not be repeated.

Soldier indoors. Indoors, an unarmed enlisted man uncovers and stands at attention upon the approach of an officer. If armed with rifle, he renders the rifle salute at the order or trail.

(NOTE. According to custom, the term "indoors" is interpreted as meaning military offices, barracks, quarters and similar places,—it does not mean such public places as stores, storehouses, riding halls, stables, post exchange buildings, hotels, places of amusement, and railway and steamboat stations. In such places an unarmed soldier renders the right hand salute.)

Officer approaching number of soldiers in open. When an officer approaches a number of enlisted men out of doors, the word attention should be given by someone who perceives him, when all stand at attention and all salute. It is customary for all to salute at or about the same instant, taking the time from the soldier nearest the officer, and who salutes when the officer is six paces from him.

At work. Soldiers actually at work do not cease work to salute an officer unless addressed by him.

Riding in wagon. A soldier riding in a wagon should salute officers that he passes. He would salute without rising. Likewise, a soldier driving a wagon should salute, unless both hands are occupied.

Passing officer on staircase. It is customary for a soldier who is passed by an officer on a staircase to come to a halt and stand at attention.

Addressing or being addressed by an officer. Before addressing an officer, or when addressed by an officer, an enlisted man makes the prescribed salute with the weapon with which he is armed; or, if unarmed, with the right hand. He also makes the same salute after receiving a reply.

How salutes are rendered in uniform. In uniform, covered or uncovered, but not in formation, officers and enlisted men salute military persons as follows: With arms in hand, the salute prescribed for that arm (senti-

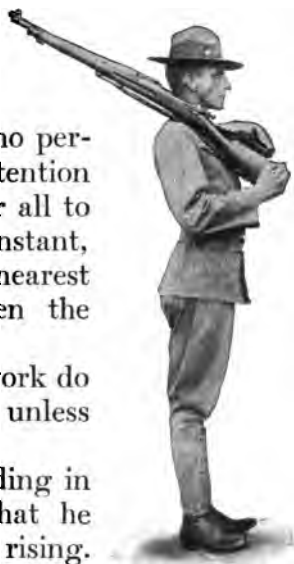


FIG. 8

nels on interior guard duty excepted) ; without arms, the right hand salute.

Rifle salute. Enlisted men out of doors and armed with the rifle, salute with the piece at the right shoulder; if indoors, the rifle salute is rendered at the order or trail.

Saber salute. An enlisted man armed with the saber renders the saber salute, if the saber is drawn; otherwise he salutes with the hand.

Sentinels on post. A soldier salutes with the "present arms" only when actually on post as a sentinel doing interior guard duty. At all other times when armed with the rifle he salutes with the prescribed rifle salute.

The general rules and principles of saluting apply to sentinels on post doing interior guard duty, except, as just stated, they salute by presenting arms when armed with the rifle. However, they do not salute if it interferes with the proper performance of their duties.

How salutes are rendered in civilian dress. In civilian dress, covered or uncovered, officers and enlisted men salute military persons with the right-hand salute.

Rendering salutes in military manner. All the prescribed salutes will be rendered in a military manner, the enlisted man saluting first.

Mounted soldier dismounting before addressing dismounted officer. Except in the field under campaign or simulated campaign conditions, a mounted soldier dismounts before addressing an officer not mounted.

Man addressed in formation. A man in formation shall not salute when directly addressed, but shall come to attention if at rest or at ease.

In public places and conveyances. In public conveyances, such as railway trains and street cars, and in public places, such as theaters, honors and personal salutes may



FIG. 9
*Needed: A Week
of extra fatigue.*

be omitted when palpably inappropriate or apt to disturb or annoy civilians present.

For instance, as a rule, it may be said that an enlisted man riding in a street car, or in the act of purchasing goods in a store, or eating in a restaurant, would not salute unless addressed by an officer. However, in case of a soldier occupying a seat in a crowded street or railway car, if he recognized a person standing to be an officer, it would be but an act of courtesy for him to rise, salute and offer the officer his seat.

No compliments paid at drill, on march, etc. Salutes and honors, as a rule, are not paid by troops actually engaged in drill, on the march, or in the field under campaign or simulated campaign conditions. Troops on the service of security pay no compliments whatever.

No saluting at double time, trot or gallop. Salutes are not rendered when marching in double time or at the trot or gallop. The soldier must first come to quick time or walk before saluting.

The question of gait applies to the person saluting and not to the one saluted,—so, a soldier would salute an officer passing in double time or at a trot or gallop.

Enlisted man in command of detachment. A non-commissioned officer or private in command of a detachment without arms salutes all officers with the hand, but if the detachment be on foot and armed with the rifle, he makes the rifle salute, and if armed with a saber he salutes with it.



FIG. 10

MISCELLANEOUS

Soldier walking with officer. A soldier accompanying an officer walks on the officer's left and about one pace to his rear.

Prisoners do not salute. Prisoners do not salute officers. They merely stand at attention. In some commands it is customary for paroled prisoners and others who are not under the immediate charge of sentinels, to fold their arms when passing or addressing officers.

Unmilitary salutes. It is very unmilitary to salute with the coat unbuttoned or with the hand in the pocket, or a cigarette, cigar or pipe in the month.

Headdress not raised in saluting. The headdress must not be raised to ladies, but they must be given the military salute. (War Dept. decision, August, 1913.)

Caution. In saluting, the hand or weapon is held in the position of salute until the salute has been acknowledged or until the officer has passed or has been passed.

Respect to be Paid the National Anthem, the Flag and Colors and Standards

The National Anthem. Whenever *The Star Spangled Banner* is played at any place where persons belonging to the military service are present, all officers and enlisted men not in formation shall stand at attention facing toward the music (except at retreat, when

they shall face toward the flag). If in uniform, covered or uncovered, or in civilian clothes, uncovered, they shall salute at the first note of the anthem. If not in uniform and covered, they shall uncover at the first note of the anthem, holding the headdress opposite the left shoulder and so remain until its close, except that in inclement weather the headdress may be slightly raised.

The same marks of respect prescribed for observance during the playing of the National Anthem of the United States shall be shown toward the national anthem of any other country when played upon official occasions.

The Flag. The flag is lowered at the sounding of the last note of the retreat, and while it is being lowered the band plays *The Star Spangled Banner*, or, if there is no band present, the field music sounds to the color.

When to the color, or to the standard is sounded by the field music the same respect will be observed as when *The Star Spangled Banner* is played by the band. Flags on flag staffs and other permanent poles are not saluted.

Colors and Standards. By *Colors* and *Standards* is meant the national flags and the regimental flags that are carried by regiments and separate battalions. They may be of either silk or bunting. In the Army Regulations the word *color* is used in referring to regiments of infantry, battalions of Philippine scouts, and the coast artillery, while *standard* is used in reference to regiments of cavalry and field artillery.

By *Flag* is meant the national emblem that waves from flag staffs and other stationary poles. They are always of bunting.

Colors and Standards. Officers and enlisted men passing the *uncased* color or standard will salute as follows: If in uniform, covered or uncovered, they will, with arms in hand, render the salute prescribed for that

arm, and, without arms in hand, they will render the right-hand salute. If in civilian dress and covered, they will uncover, holding the headdress opposite the left shoulder with the right hand, and if uncovered, they will salute with the right-hand salute.

NOTE. Colors and standards that are cased,—that is to say, that are in their waterproof case,—are not saluted.)

Usual Mistakes in Saluting

The following are the mistakes usually made by soldiers in rendering salutes:—

1. They do not begin the salute soon enough; often they do not raise the hand to the headdress until they are only a pace or two from the officer—the salute should always begin when at least six paces from the officer.

2. They do not turn the head and eyes toward the officer who is saluted—the head and eyes should always be turned toward the officer saluted and kept turned as long as the hand is raised.

3. The hand is not kept to the headdress until the salute is acknowledged by the officer—the hand should always be kept raised until the salute has been acknowledged, or it is evident the officer has not seen the saluter.

5. The salute is often rendered in an indifferent, lax manner—the salute should always be rendered with life, snap and vim; the soldier should always render a salute as if he *meant it*.

CHAPTER VI

MILITARY DEPORTMENT AND APPEAR-
ANCE—OBEDIENCE—RESPECT TO
NONCOMMISSIONED OFFICERS
—FORMS OF SPEECH—MIS-
CELLANEOUS

Military Deportment and Appearance. The enlisted man is no longer a civilian but a soldier. He is, however, still a citizen of the United States and by becoming a soldier also he is in no way relieved of the responsibilities of a citizen; he has merely assumed in addition thereto the responsibilities of a soldier. For instance, if he should visit an adjoining town and become drunk and disorderly while in uniform, not only could he be arrested and tried by the civil authorities, but he could also be tried by the summary court at his post for conduct to the prejudice of good order and military discipline. Indeed, his uniform is in no way whatsoever a license for him to do anything contrary to law and be protected by the government.

Being a soldier, he must conduct himself as such at all times, that he may be looked upon not only by his superior officers as a soldier, but also by the public as a man in every way worthy of the uniform of the American soldier.

Whether on or off duty, he should always look neat and clean, ever remembering that in bearing and in con-

versation he should be every inch a soldier—shoes must be clean and polished at all times; no chewing, spitting, gazing about, or raising of hands in ranks—he should know his drill, his orders and his duties—he should always be ready and willing to learn all he can about his profession—he should never debase himself with drink.

A soldier's uniform is more than a mere suit of clothes that is worn to hide nakedness and protect the body. The uniform of an army symbolizes its respectability, its honor, its traditions, and its achievements, just as the flag of a nation symbolizes its honor, dignity and history. Always remember this, and remember, too, that the soldier who brings reproach upon his uniform is in the same class as the priest who brings dishonor upon his robes.

It is not given to every man to wear the uniform of his Country's army,—it is an honor and a privilege to do so, and no individual has a right to abuse this honor and privilege by bringing the uniform into disrepute through misbehavior.

It should be remembered that the soldiers of a command can make the uniform carry distinction and respect, or they can make it a thing to be derided.

The soldier should take pride in his uniform.

A soldier should be soldierly in dress, soldierly in carriage, soldierly in courtesies.

A civilian owes it to himself to be neat in dress. A soldier owes it to more than himself—he owes it to his comrades, to his company—he owes it to his country, for just so far as a soldier is slack so far does his company suffer; his shabbiness reflects first upon himself,

then upon his company and finally upon the entire Army.

It is a fact known to students of human nature that just in proportion as a man is neatly and trimly dressed is he apt to conduct himself with like decency. The worst vagabonds in our communities are the tramps, with their dirty bodies and dirty clothes; the most brutal deeds in all history were those of the ragged, motley mobs of Paris in the days of the French Revolution; the first act of the mutineer has ever been to debase and deride his uniform.

The man who misbehaves himself in uniform in public creates a bad impression of the whole command, as a result of which his comrades must suffer. Remember that a man in the uniform of a soldier is conspicuous,—much more so than a civilian,—and consequently any misconduct on his part is more noticeable than if done in civilian clothes. The man who deliberately besmirches the uniform of his Country's army by appearing in public drunk or by other misconduct, not only fouls his own nest, but he also dishonors the uniform worn by his self-respecting comrades.

It is a well known fact that laxity in dress and negligence in military courtesy run hand in hand with laxity and negligence in almost everything else, and that is why we can always look for certain infallible symptoms in the individual dress, carriage and courtesies of soldiers.

Should a soldier give care and attention to his dress?

Yes; not only should a soldier be always neatly dressed, but he should also be properly dressed—that is, he should be dressed as required by regulations. A soldier should always be neat and trim, precise in dress

and carriage and punctilious in salute. Under no circumstances should the blouse or overcoat be worn unbuttoned, or the cap back or on the side of the head. His hair should be kept properly trimmed, his face clean shaven or beard trimmed and his shoes polished, his trousers pressed, the garrison belt accurately fitted to the waist so that it does not sag, his leggins cleaned, his brass letters, numbers and crossed rifles polished, and his white gloves immaculate.

Should a man ever be allowed to leave the post on pass if not properly dressed?

No; never. The Army Regulations require that chiefs of squads shall see that such members of their squads as have passes leave the post in proper dress.

Should a soldier ever stand or walk with his hands in his pockets?

No; never. There is nothing more unmilitary than to see a soldier standing or walking with his hands in his pockets.

The real soldier always stands erect. He never slouches.

Is it permissible, while in uniform, to wear picture buttons, chains, watch charms, etc., exposed to view?

No; it is not.

May the campaign hat or any other parts of the uniform be worn with civilian dress?

No; this is prohibited by the Uniform Regulations, which especially states that when the civilian dress is worn it will not be accompanied by any mark or part of the uniform.

May a mixed uniform be worn—for example, a cotton olive drab coat and woolen olive drab breeches?

No; under no circumstances.

When the company commander or any other officer sends for a soldier to report to him in the company office or any other place, the soldier must report in proper uniform.

Obedience. *What is Obedience?* It is compliance with everything that is required by authority—it is the mainspring, the very soul and essence of all military duty. It is said a famous general once remarked every soldier should know three things—"First, *obedience*; second, *obedience*; third, *obedience*."

Cheerful, earnest and loyal obedience must be paid by all subordinates to the orders of their superiors.

A soldier should obey first and if aggrieved complain afterward.

All duty should be performed cheerfully and willingly. Soldiers are sometimes required to perform duties that are not pleasant—for instance, doing guard duty on a cold, rainy night, when tired and sleepy; digging ditches or cleaning up dirt and filth that have accumulated around the barracks, kitchens, quarters, etc., scrubbing floors, polishing stoves, cleaning knives, forks, pots, etc. However, by doing everything required of him in a cheerful manner, a soldier will soon earn the respect of his comrades and the commendation of his officers.

Respect and Obedience to Noncommissioned Officers. In the orders and directions that they give, company noncommissioned officers represent the company commander, and they must be obeyed and respected at all times and under all circumstances.

- Orders and regulations require that men respect and obey their noncommissioned officers, and discipline makes it imperative that they do so.

It is not for a private to question in any way the fairness, justice, propriety or wisdom of an order received from a noncommissioned officer. When ordered by a noncommissioned officer to do a thing, whatever it may be, do it promptly and thoroughly, and then if you feel that you have been injured in any way, report the matter to your company commander, who will see that you receive justice. If the noncommissioned officer made a mistake, exceeded his authority, or treated you unfairly, he will be punished by the company commander. The company commander, and not the privates of the company, is to judge the conduct of his noncommissioned officers, who are directly responsible to him for every act of theirs.

If every subordinate were to question the fairness, justice, propriety or wisdom of orders received from noncommissioned officers or other superiors, there would be no discipline, and the Army would soon degenerate into a mob.

Remember, a soldier is supposed to obey *first*, and, if aggrieved, complain *afterward*.

And remember, too, that the authority of noncommissioned officers is not confined to the drill ground, the barracks and the post or camp. Whether you are on pass, in a theatre, in a street car, on a train, on the street or anywhere else, if you receive an order from a noncommissioned officer you are to obey it just the same as if it were given you at drill or in barracks.

Forms of Speech. In speaking to an officer it is not proper for a soldier to say, "You, etc.," but the third person should always be used, as, for example, "*Does the captain want his horse this morning?*"—do not say, "Do you want your horse this morning?" "The lieutenant is wanted on the 'phone,"—not "You are wanted on the 'phone."

In beginning a conversation with an officer, a soldier should use the third person in referring to himself instead of the pronouns "I" and "me." However, after the conversation has commenced, it is perfectly proper, and usual, for the soldier to use the pronouns "I" and "me," but an officer is *always* addressed in the third person and never as "you."

In speaking to an officer, an enlisted man should refer to another enlisted man by proper title, as, "*Sergeant Richards,*" "*Corporal Smith,*" "*Private Wilson.*"

Privates and others should always address noncommissioned officers by their titles. For example, "*Sergeant Smith,*" "*Corporal Jones,*" etc., and not "*Smith,*" "*Jones,*" etc.

When asked his name, a soldier should answer, for instance, "*Private Jones, sir.*"

When given an order or instructions of any kind by an officer, or noncommissioned officer, a soldier should always say, "*Yes, sir,*" thus letting the officer or noncommissioned officer know that the soldier understands the order or instructions. Don't say, "Very well, sir," or "All'right, sir"; say, "*Yes, sir*"—it's the direct, military way of answering.

Short, direct answers should be made in the form of, "No, sir," "Yes, sir," "I don't know, sir," "I will try, sir," etc.

Do not use slang in speaking to an officer.

Never interrupt an officer while he is speaking. Always wait until he is through talking before you begin to speak.

After a soldier has finished a thing that he was ordered to do, he should always report to the officer who gave him the order. For example, "The captain's message to Lieutenant Smith has been delivered."

If ordered to report to an officer for any purpose, do not go away without first ascertaining if the officer is through with you, as it often happens he has something else he would like to have you do. After having finished the work given in the beginning, report, for instance, "*Sir, is the captain through with me?*"

When an officer calls a soldier who is some distance away, the soldier should immediately salute, and say, "*Yes, sir,*" and, if necessary, approach the officer with a quickened step. If the officer is waiting on the soldier, the latter should take up the double time.

Always salute an officer when he leaves you after a conversation or at any other time. And always salute just as soon as the officer makes the first move to leave. Don't wait until he has moved away several feet before saluting.

MISCELLANEOUS

How to Enter an Office. In entering an office a soldier should give two or three knocks at the door

(whether it be open or closed); when told to come in, enter, taking off the hat (if unarmed), close the door (if it was closed before you entered) and remain just inside the door until asked what is wanted; then go within a short distance of the officer, stand at attention, salute, if covered and armed, and make known your request in as few words as possible. On completion, salute, if covered and armed, face toward the door, and go out, being careful to close the door if it was closed when you entered. If it was not closed, leave it open.

Complaints to the Captain. Complaints must never be made directly to the captain unless the soldier has the captain's permission to do so, or the first sergeant refuses to have the matter reported. If dissatisfied with his food, clothing, duties, or treatment, the facts should be reported to the first sergeant, with the request, if necessary, to see the captain.

It is also customary for soldiers who wish to speak to the captain about anything to see the first sergeant first, and when speaking to the captain to inform him that they have the first sergeant's permission to do so. Thus: "Private Smith has the first sergeant's permission to speak to the captain," etc.

How the Soldier is Paid. As soon as the company is formed in column of files, take off your right hand glove, and fold it around your belt in front of the right hip. When your name is called, answer "Here," step forward and halt directly in front of the paymaster, who will be directly behind the table; salute him (if covered). When he spreads out your pay on the table in front of you, count it quickly, take it up with your ungloved hand, execute a left or right face and leave the room and

building, unless you wish to deposit, in which case, you will remain in the hall outside the pay-room, until the company has been paid, when you enter the pay-room. Men wishing to deposit money with the paymaster, will always notify the first sergeant before the company is marched to the pay table.

Delivery of Messages. When an enlisted man receives a message, verbal or written, from an officer for delivery, he will, in case he does not understand his instructions, ask the officer to repeat them, saying, for instance, "Sir, Private Smith does not understand; will the captain please repeat?" When he has received his instructions, and understands them, he will salute, and say: "Yes, sir," execute an about face, and proceed immediately to the officer for whom the message is intended. He will halt three or four paces directly in front of the officer and *if the officer be junior to the officer sending the message*, he will say, "Sir, Captain Smith presents his compliments," etc., and then deliver the message, or "The commanding officer presents his compliments to Lieutenant Smith and would like to see him at headquarters." He will salute immediately before he begins to address the officer and will hold his hand at the position of salute while he says, "Sir, Captain Smith presents his compliments," or "The commanding officer presents his compliments to Lieutenant Smith." If the officer sending the message be junior to the one receiving it, the soldier will not present his compliments, but will say, for instance, "Sir, Lieutenant Smith directed me to hand this letter to the captain," or "Sir, Lieutenant Smith directed me to say to the captain," etc. As soon as the message has been delivered, the soldier

will salute, execute an about face, and proceed at once to the officer who sent the message, and will similarly report to him, "Sir, the lieutenant's message to Captain Smith has been delivered," and leave.

Before leaving an officer to whom you deliver a message always ascertain whether there is an answer.

The compliments of a junior are never presented to a senior. For instance, never say to a captain that a lieutenant presents his compliments to him.

Appearance as Witness. The uniform is that prescribed, with side arms and gloves. Proceed to the courtroom and remain outside. When you are notified that you are wanted enter the room. Then take off your cap and right hand glove, and raise your right hand above your head, palm to the front, to be sworn. After the judge-advocate reads the oath, say, "I do" or "So help me God." Then sit down in the chair indicated by the judge-advocate. Do not cross your legs, but sit upright. When asked, "Do you know the accused? If, so, state who he is," answer, "I do; Corporal John Jones, Co. 'B' 1st Infantry." Be sure you thoroughly understand every question before you start to reply, answering them all promptly, in a loud, distinct, deliberate voice, and confining your answers strictly to the questions asked and telling all you know.

When the judge-advocate says, "That is all," arise, salute him, execute an about face, and leave the room.

At some posts it is customary for soldiers to appear in the same manner when summoned as a witness before a summary court, while at other posts side arms and gloves are not worn.

CHAPTER VII

CARE OF THE HEALTH¹

Importance of good health. The strength of an army is not in its muster rolls, but in the number of men able to fight. Every sick man takes one rifle away from the firing line.

Good health is just as necessary to any army as rifles and ammunition.

A sick army is only a hospital, and no hospital has ever won a battle.

Because of the great demands made upon the body by marching, exposure to all sorts of weather and other hardships, and the nervous and physical strain of modern battle,—because of these demands upon the body, there is no other business in the world whose success depends so much on good health as does the business of soldiering.

Indeed, it is just as necessary for you to take care of your health as it is for you to take care of your rifle and ammunition.

The importance of doing everything possible to care for one's health is shown by the fact that history shows that in every war so far, many more men have died from disease than were killed in battle or died from wounds.

In our Civil War, for instance, for every man on the Union side who was killed in battle or died from wounds,

¹ This chapter as well as Chapter VIII, *Camp Sanitation*, and Chapter IX, *First Aid to the Sick and Injured*, were prepared by Major Frank Thomas Woodbury, Medical Corps, U. S. Army, who is regarded as one of the best lecturers in the service on the subjects named.

two died from disease. In the Spanish-American War the proportion was 1 to $5\frac{1}{2}$.

Kinds of sickness. *There are only two kinds of sickness;*

1. The kind that can be caught from other people or from animals.

2. The kind that can *not* be caught from other people or from animals.

DISEASES THAT CAN BE CAUGHT FROM OTHER PEOPLE OR ANIMALS

Germ. All diseases that can be caught are caused by little, tiny live animals or plants. They are called *germs*. Some of them are so small that you require a magnifying glass to see them.

Diseases that can be caught from other people or animals are called *infectious*. The entrance of germs into the body is called an *infection*.

(Note. A *contagious* disease is an infectious disease which is caught by *touching* other people or animals, or articles which have touched them as handkerchiefs, towels, books, letters, dishes, toys or pet animals.)

Infectious diseases are of great military importance, as they cause epidemics or pestilences,—that is, they spread rapidly from person to person until many people are sick at the same time.

They are the diseases that put most of the soldiers on the sick report when their country needs them on the firing line.

But, what is most important, they are unnecessary and can be prevented by care and attention.

The following illustrations show the typhoid and malarial germs and a tapeworm egg as seen through a magnifying glass:

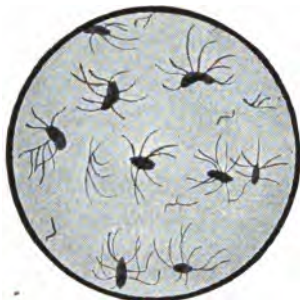
Typhoid germs*Magnified 1200 times**Malarial germs**Magnified 1200 times**Tapeworm egg**Magnified 1000 times*

FIG. 1

Germs,—these little, tiny live animals and plants,—have peculiarities, and, just like larger animals and plants, they live and thrive under various conditions.

The polar bear and iceland moss, for example, live only in the arctic regions, and the palm tree and the alligator are found only in the tropics.

The water lily grows in water while the sage brush lives in the dry desert.

In the same way germs (the little animals and plants that cause disease) prefer certain parts of the body to grow in. And just the same as some earth is poor soil for certain plants to grow in so are some persons poor soil for certain disease germs to grow in and consequently such persons may have a very mild case of sickness or none at all, while other persons would have a very severe case of the same disease.

This is important to know because it teaches us the importance of avoiding persons who are only slightly sick, as they are able to give us germs that may grow very well in us and make us very sick, even perhaps causing death.

There is another peculiarity of germs that must be understood.

Just as a man can live safely with a tame bear that he has trained, but that will bite strangers, so do many persons live perfectly well with disease germs in them, which, if given to other persons, would make them sick. Such persons are called, *Carriers*, and often live unsuspected while causing sickness among those they meet.

However, all germs do not cause disease,—it's only those that make a poison (called "Toxin") that make us sick.

When a germ does not make a toxin (poison) it is harmless. There are many such harmless germs living in our bodies, some of which are useful to us.

Sickness is really caused by a fight between a germ and its poison (toxin) on one side, and the body on the other. If the body is stronger than the poison, the man

gets well. If the poison is stronger than the body, the man dies.

It is not uncommon for different kinds of germs to produce similar signs (symptoms) of disease. Therefore, from your symptoms you may think you have a certain disease while, as a matter of fact, you have another. We see from this the danger of a man trying to doctor himself by buying patent medicines and the chance he takes of injuring himself. If you do not feel well, see the surgeon, who will prescribe for you. Let him decide what is the matter. That is what he is for.

Don't think it manly to keep off the sick report when you don't feel well. It is foolish,—not manly. You may be giving your disease to every member of your squad. That is often the way epidemics get started amongst troops. Make it a military duty to avoid sick people, and if any member of your company complains of headache, chills or sore throat or cold, have him see the surgeon at once. Very often the worst diseases begin with little troubles.

A sick soldier, especially in the field, should be in a hospital where he can be taken care of and where he will not give his disease to others.

Remember that every soldier should be a sanitary sentry always on guard against sickness to himself as well as on guard against sickness to his squad, company and regiment.

While on post as a sentry, if you see anything going wrong you call the corporal of the guard at once and report it. So, likewise in your capacity as a sanitary sentry, if you see anything unsanitary try to correct it at once or report it to those who can correct it.

An army is like a baseball team. It is organized, equipped and trained to win. But it can not win if a lot of the players are sick.

Remember you did not enlist to be sick when your country needs you to fight.

THE DIFFERENT WAYS OF CATCHING DISEASE

There are only five ways to catch disease:

1. BY BREATHING IN THE LIVE GERMS.

2. BY SWALLOWING THE LIVE GERMS.

3. BY TOUCHING THE LIVE GERMS.

4. BY HAVING THE LIVE GERMS STUCK INTO THE SKIN BY INSECTS THAT BITE.

5. BY INHERITANCE FROM PARENTS.

If you lived on a desert island alone, you could not catch disease, because there would be no one to catch it from, and if a thousand well persons came and joined you, still there would be no sickness, but if one sick person or a "carrier" came, that would be enough to make everyone on the island sick.

DISEASES CAUGHT BY BREATHING IN THE GERMS

Colds in the head

Scarlet Fever

Diphtheria

Mumps

Croup

Meningitis (brain fever,
spotted fever)

Tonsilitis or quincy

Pneumonia (lung fever)

Whooping cough

Bronchitis

Influenza ("the grippe")

Consumption (tuberculosis
of the lungs)

Rheumatism

Running ear or earache

Measles

The germs that cause these diseases grow well in the dark, warm, moist lining of the nose, throat, wind-pipe and lungs, and they are coughed or sneezed out or blown out and float in tiny bubbles in the air or fall to dry into dust which is blown about with the wind, and so are breathed in, or they may be transferred directly by kissing invalids and sick children.

HOW TO AVOID BREATHING IN SICKNESS

Do not visit sick people or a house where the children are sick.



FIG. 2

*Distributing
sickness*

Do not let other people cough or sneeze over your food or in your face.

Do not allow others to spit on the floor of your squadroom or tent.

Do not do these things yourself.

Blow your nose into a handkerchief that can be boiled or into a piece of paper that can be burned.

Put your hand before your face when you cough or sneeze.

A man with a cough or sneezing should be sent at once to see a medical officer. Put him on sick report. He is dangerous to the rest of the company.

Rinse out the nose with hot, weak salt water at night and especially after a dusty hike.

Brush the teeth after each meal and before going to bed.

Do not pick the nose with the finger nails; it makes sore spots in which germs grow.

On dusty hikes tie a handkerchief across the nose and mouth.

Never sweep the floor with a dry broom. Use a damp mop and so pick the germs up and carry them out instead of driving them up in the air as dust.

When persons have come in contact with diphtheria patients we prevent the disease by injecting an antidote to the poison (toxin) of the diphtheria germ, which we call, *Antitoxin*.

DISEASES CAUGHT BY SWALLOWING THE GERMS

Typhoid fever	Tuberculosis of bones,
Dysentery	glands and brain
Cholera	Worms
Summer complaint (diarrhoea of infants)	Trichinosis (fleshworms)
	Ptomaine poisoning

The bowels as a living place for germs. The germs of the diseases just named and some of the worms, when swallowed, grow well in the bowels and from there may enter the blood. Others stay in the bowels. In any case the germs and the eggs of the worms pass out of the body in the bowel movements. Some of the eggs are swallowed by animals and enter their flesh, which when eaten, partly cooked, will give worms.

Water as a distributer of disease. When the bowel movements get into water courses these germs enter the water mains of cities and towns or get into reservoirs or wells. In a great many country places what goes down in the privy comes up in the neighboring well, having traveled underground.

You cannot always tell polluted water by its appearance, smell or taste. Unless from a sewer or drain, it may look clear and sparkling, with no smell and have a pleasant, sweetish taste.



FIG. 3

What goes down in the privy often comes up in the well

Avoid water from unknown sources. Water from sources unknown or soiled by sewage, should be avoided as deadly, even when frozen, and should not be used, *unless boiled*, for drinking, brushing the teeth, washing salads or vegetables or rinsing mess kits. All drinks, especially milk, diluted with such ice or water are dangerous.



FIG. 4

Water method of infection

Vegetables as a distributor of disease. In some localities the inhabitants use the streams for all purposes; drinking, washing clothes, bathing, washing vegetables and table utensils and as a sewer. When kitchen gardens are irrigated with such water the germs are to be found on the cabbages, beets, etc.

In the Philippine Islands, Hawaii, and along the Mexican border, Chinese truck gardeners use diluted

human excrement to sprinkle over the plants and the germs may be found between the leaves of cabbage and lettuce and on parsley, radishes, beets, spinach and asparagus, even after a thorough washing.

Food, fruit, cigarettes and drinking cups as distributors of disease. Germs are readily smeared on the hands of nurses or friends of the patient and may be transferred to articles of food, fruit, cigarettes or drinking cups, especially in public places, so that the soldier buying at the public stands is likely to have disease handed to him with his purchase.

The fly as a disease carrier. The ordinary fly is one of the worst and filthiest transmitters of disease in existence.

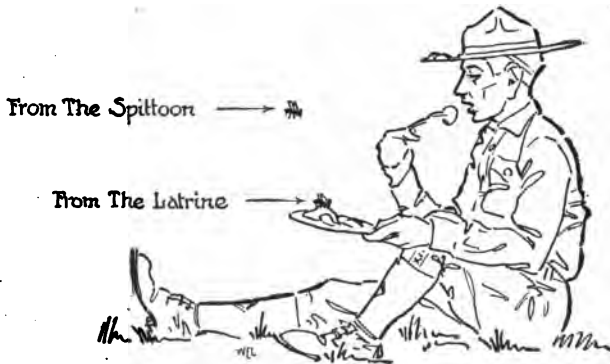


FIG 5

Flies carry germs from privies, latrines, spittoons, and sick rooms to the food on your table, by means of their smeared feet, in their spit or in their specks.

Tuberculosis. The germs of tuberculosis may be swallowed and after growing in the bowels pass into the blood and so go to any organ of the body. They cause

a great many forms of disease, the principal ones being consumption and bone disease. Great numbers of germs are coughed up and spit out by consumptives. Most of the crippled children which we see, especially those with humped backs and hip joint disease, owe their trouble to tubercle germs that they swallowed in the milk of tuberculous cows.

Dwellings for worms; the company dog as a distributor. Pigs, dogs, cats, cattle and people with dirty habits, especially children, are liable to have worms. The eggs of worms are passed out and are often smeared on the hands and so carried to the mouth. The company dog is often a distributor of worms to the company. He uses his tongue for toilet paper and afterwards licks his coat or licks the hands of his friends. Petting the company dog or any dog or letting him lick your hand is dangerous. You should at once wash your hands.



FIG. 6

Nice doggie!
(And "nice doggie" may be
giving him some disease)

The hookworm. The hookworm eggs pass out of the body and hatch out in damp soil. The little worms will enter the skin of the bare feet causing "ground itch" or "dew itch." They then travel to the lungs, pass up the windpipe and are swallowed. When they reach the small bowel they attach themselves in great numbers and poison the blood so that it becomes very thin and makes the patient extremely weak and an invalid.

Trichinosis (pronounced *trick-i-nó-sis*). Certain very tiny worm eggs are found in the flesh of animals which, when eaten partly cooked, are swallowed alive and will grow in the bowels. In one form of the disease the worms burrow into the muscles and make little stony cocoons which give great pain like rheumatism and may cause death. This disease is called trichinosis.

Ptomaine poisoning. Ptomaine poisoning is due to the poisons of germs that grow in spoiled meats, fish or milk.

HOW TO AVOID SWALLOWING DISEASES

Do not drink water that is not called safe by your company commander. If you have no one to ask and are traveling, it is safer to drink tea or coffee, because they have been made from boiled water, or to drink bottled mineral waters. In the field boil your drinking water. Boiled germs are dead and will not grow. They are, therefore, harmless.



FIG. 9
Swallowing
sickness

Beware of water from wells, farm pumps, ponds, cisterns, water coolers and barrels, especially in railroad cars, stations and ferry boats.



FIG. 8
Next!
(What germs well he
leave on the cup!)

Do not drink lemonade, soft drinks or milk from peddlers around troop trains and camps. Buy these things from your post exchange.

Always drink out of your own cup.

Beware of the public drinking cup.

Always wash your hands before going to meals and before putting things into your mouth, especially after going to the latrine or handling animals.

Do not adopt strange dogs and do not pet dogs.

Before eating fruit or raw vegetables, wash and peel them unless picked from the tree by yourself.

Do not eat food that is spoiled, smells or tastes badly or is fly-blown or maggoty or full of bugs.

Do not eat food which is not sufficiently cooked. All smoked, dried or salt meats or fish, such as ham, bacon, sausage, dried beef, bloaters, salt mackerel or codfish, must be well-cooked, as they may contain "Measles" or other worm eggs. Cooking kills the eggs.

Do not eat food exposed on public stands to dust, flies, dirty hands, dirty water, dirty cans, or dirty glasses and buckets.

Do not allow flies to breed in manure nor walk on your food. This is possible by burning manure or burying it, at least three times a week (daily is safer), or spreading it out very thin so as to dry in a hot sun which kills maggots. Use fly traps, "swatters" and fly paper. A teaspoonful of formaldehyde (obtained from the surgeon) in a saucer of water is a good fly poison.



FIG. 9
*Swallowing
sickness*

Do not wet lead pencils with your spit.

Do not wet your fingers with spit when you deal cards or turn over pages of books or magazines.

Keep the teeth brushed and the mouth clean. Have decayed teeth repaired at once. Decayed teeth drop out and they cause abscesses, which may destroy the jaw

bone or cause brain fever. Old snags give the stomach the germs of rotting, which cause dyspepsia.

The great prevention of typhoid fever, called *Typhoid Prophylactic*, depends upon the fact that the typhoid germs when swallowed enter the blood and make a poison (toxin). The body makes an antidote (counteracting remedy) for this toxin called an antitoxin.

Let us compare the body to an army camp. Rioters } enter and destroy and damage (ac-
Typhoid germs } tion of the toxin). {The guard turns out}
 {Antitoxin is made } and tries to
 overcome the rioters. A fight follows (this is the
 symptom of the disease). The rioters }
 {The typhoid germs }
 are overcome and a period (convalescence) follows in
 which the {camp } is restored to a normal condition.
 {body }

Knowing this we play a trick.

We inject fifty million dead typhoid germs in a little salt water under the skin. Immediately the {guard } turns out only to find the rioters dead.
 {antitoxin }
 Their bodies are carried off. This is the period of dizziness, headache, nausea and slight fever which some few feel after the first injection. The {guard }
 {antitoxin }
 remains {on duty patrolling } . Ten days later we
 {floating in the blood }

repeat the trick with 100 million dead germs and more guard turns out } . The increased { guard }
antitoxin is made } { *antitoxin* }
 remains { on guard patrolling }
 { *floating in the blood* } .

Ten days later we repeat the trick for the third and last time when all the antitoxin possible is made. This guard or antitoxin remains patrolling in the blood for about three years or longer, so that if some live typhoid germs enter the body later and begin to make trouble they are overwhelmed by the large guard at once and no damage is done,—that is, no sickness results.

DISEASES CAUGHT BY TOUCHING THE GERMS

(Or by having them rubbed into a cut, wound, chafe, sore or other opening in the skin.)

Ringworm	Blood poisoning
Mange	Gangrene
Barber's Itch	Lockjaw
Dhobie Itch	Rabies (hydrophobia)
Sore eyes	Glanders
Inflammation and pus	Chicken pox
("matter")	Smallpox
Boils and pimples	Chancroid
Carbuncles	Syphilis (the "Great
Erysipelas (St. Anthony's	pox")
Fire)	Gonorrhœa (clap)

Lice, scabies, fleas, chiggers, bedbugs and screw-worms are also caught by touching.

Ringworm, mange, barber's itch, dhobie itch and some forms of eczema are due to small plants, called "Fungi," which resemble the mould which grows on

cheese or the mildew on leather. They are carried from person to person by finger nails and hands and from dirty water to those who bathe in it or have their underwear washed in it. Children and recruits are often infected.

The germs that cause inflammation in wounds, boils, abscesses and blood poisoning are always to be found on the skin and are everywhere in nature where men and animals are found.

The germs of lockjaw, gangrene, and gas gangrene are found in manure and in soil fertilized with it; hence, a bullet which passes through such soil before wounding carries these germs into the wound. Any wound soiled with such dirt will be infected. Also, wounds made by toy pistols and fire-crackers often contain lockjaw germs.

Glanders is a disease of horses and mules. The germs are caught from the running noses of the animal which may sneeze in the face or on the hands and so be carried to the nose or eyes of the man.

Hydrophobia is caught from the bite of mad (rabid) dogs. The germs of hydrophobia are in the spit of mad (rabid) dogs, and they travel through the nerves from the bite to the brain.

Chickenpox and smallpox are caught by touching patients or handling objects which they have handled, as handkerchiefs, towels, bedding, pet animals or toys.

Chancroid, syphilis and clap are diseases whose germs are usually caught from prostitutes and whores, or from husbands who have caught the germs from prostitutes and whores. They are called "Venereal diseases," after Venus the Roman goddess of lustful love, but

they are very often caught in other ways than in sexual intercourse, and by innocent persons.

The chancroid plant causes a very nasty sore, the *chancroid*, which often destroys much flesh and causes buboes. The germ can be carried on the fingers to any part of the body. When the chancroid is healed and the bubo becomes a scar the disease is cured.

The *syphilis* germ will grow first where it is rubbed in, causing a hard ulcer, called a chancre, and after that it travels through the entire body. No place is sacred to its destructive power and it lives as long as the patient does. It is the cause of much insanity, palsy, apoplexy, deafness, blindness and early death. In mothers it causes miscarriages and in children it causes stillbirths, freaks, deformities, feeble minds and idiots; also, deaf and dumb, palsied, stunted, sickly and criminal conditions.

A syphilitic person is always dangerous although apparently well. He often has a sore mouth and his spit is as dangerous as that of a mad dog. The bite of such a man will develop a chancre and any pipe, cup, or tooth pick which he uses, or his kiss, will give syphilis. A syphilitic tattooer who wets his needles and his India ink with spit will put a chancre into the skin with the picture.

The instruments of cheap advertising dentists and of quack doctors or ignorant nurses can carry these germs from one person to another. So can the razors and caustic stick of barbers who are careless.

The clap plant likes to grow in the linings of the openings of the body where it is dark and warm and moist where it causes a catarrhal discharge called *clap*,

which is easily smeared on hands, towels, handkerchiefs or by actual contact.

It grows well in the eyelids, causing great damage and often blindness. Many babies get the clap plant into the eyes during birth, from the mother, and unless treated within a few minutes after birth, have sore eyes and go blind,—a terrible calamity to the child and the family. If you have clap the germs can be carried on your hands to your eyes.

The clap plant also grows well in the cavities of the joints, causing rheumatism and crippling; it grows in the heart, causing valvular heart disease, which is incurable, and also in the generative organs of men and women, causing self-made eunuchs and childless wives. It is the cause of most of the severe abdominal diseases of women requiring the use of the knife to cut out the diseased part.

The venereal diseases cause more misery than any others and most of the doctors would have to go into other professions to earn their living if these diseases did not exist.

When a young man is "sowing his wild oats" he is really planting in his own body the syphilis and clap plants, and the harvest will be greater than any other crop. He will reap it in days of bed-ridden misery, and possible sudden death. He will reap it in bitter hours by the bedside through the illness and death of his wife or in her long years of ill health. He will reap it in little white coffins, idiot babies; blind, deaf and dumb, sickly and stunted children. And it will cost him lost wages and hospital and doctor fees.

Yes, the wild oats crop is a bumper crop. King Solomon was wise when he warned his son against the harlot, "for her end is bitter."

HOW TO AVOID TOUCHING DISEASES

Keep your skin clean with soap and water.

Do not bathe or wash your clothes in dirty water, have them boiled when laundered.

Do not go barefoot, even in barracks.

Do not use towels or toilet articles of other people, especially in public wash-rooms unless they furnish a fresh towel for you. Do not sleep in houses left empty by the enemy unless ordered to do so.

Do not sleep in native shacks in the tropics.

Do not rub the eyes with dirty hands. When dirt gets in have a doctor get it out.

If you have clap, do not rub your eyes with your hands, and wash your hands well with soap and water after taking treatment or passing water.

Do not handle dogs or cats, especially strange or sickly ones.

Do not clean the ears with sticks or straws,—have a doctor do it for you.

Do not have cheap, advertising dentists fix your teeth. Have the army dentist fix them and see him at least once every six months,—or see a good civilian dentist.

Do not have pictures tattooed on your skin.

Do not smoke other men's pipes.

Do not handle or touch wounds with anything but a first aid package.

Beware of chipped drinking glasses in cafés, restaurants and other places. The slightest cut from such a glass whose chipped part has been in contact with the mouth of a syphilitic person will give you syphilis.

The company barber must scald his razors and soap after every shave and must not use caustic stick on sores and cuts.

Smallpox is prevented by rubbing the germs of cowpox, a very mild disease, into a scratch in the cleaned skin. This is called vaccination. The body makes an antitoxin to cowpox, which is also an antitoxin to smallpox.

Hydrophobia is prevented by avoiding dogs, by having pet dogs muzzled and by catching and tying up or killing strange dogs. There is no hydrophobia in England or Australia because for a number of years all dogs were muzzled. Now dogs do not have to be muzzled there.

If bitten by a rabid dog, you must take the Pasteur treatment as soon as possible.

Seek good companions like your mother and sister. Keep away from John Barleycorn. He always wants to turn you over to a harlot.

Whores and prostitutes are all diseased and will give you germs that will live to give diseases to you, your wife and your children, forty years from now. Keep away from them.

War Department orders regarding venereal disease. General Orders No. 31, War Department, 1912, direct that no enlisted man "absent from duty on account of disease resulting from his own intemperate use of

drugs or alcoholic liquors or *other misconduct* shall receive pay for the period of such absence."

General Orders No. 71, War Department, 1913, amending G. O., 17, W. D., 1912, direct that, "Commanding officers will require that men who expose themselves to the danger of contracting venereal disease shall at once upon their return to camp or garrison report to the hospital or dispensary for the application of such cleansing and prophylaxis as may be prescribed by the Surgeon General. Any soldier who fails to comply with these instructions shall be brought to trial by court-martial for neglect of duty." It further states that a medical officer and each organization commander will make two physical inspections of all the enlisted men of the command (except married men of good character) each month to observe the state of personal cleanliness and detect venereal diseases.

Should you discover that you have clap or other venereal disease, report to the hospital *at once* for treatment. You will receive the best possible treatment and it will cost you nothing. Don't commit the error of attempting to hide your misfortune or of going to some cheap civilian doctor in the hopes of keeping the facts from the military authorities. It is much better to go to the hospital *immediately*, receive proper treatment, and forfeit a few day's pay than it is to risk your future health and happiness.

The cleaning mentioned in the above order consists of:

1. Washing the penis thoroughly with soap and water.

2. Injecting into the penis a solution of 2% Pro-targol (2 parts in water to make 100) which must be kept in the penis for 5 minutes, by the watch, in order to kill the clap plants. This is done by pinching the opening of the penis. Repeat this.

3. Rubbing in thoroughly all over the penis an ointment (of Calomel 30 parts in Benzoinated Lard to make 100 parts). Protect this by paper or cloth. This is to kill syphilis and chancroid germs.

This treatment has also been put up in a collapsible metal tube inside a cigar shaped container to be carried in the vest pocket. It is called a "K packet," and is sold by drug stores and some post exchanges for a few cents.

DISEASES CAUGHT FROM BITING INSECTS

Malaria	Plague (bubonic fever)
Yellow fever	Rocky Mountain fever
Dengue fever	(spotted fever)
Typhus fever (jail fever)	Sand-fly fever

The germs of malaria, yellow fever and dengue fever live in the blood and are sucked up into the blood by mosquitoes when they bite.

Malaria germs, however, will develop only in the mosquito called, *Anopheles*.

Yellow fever germs will develop only in the mosquito called *Stegomyia*.

Dengue fever germs will develop in the mosquito called *Culex* and in *Anopheles*.

After a period of development in these mosquitoes the germs will find their way to the



FIG. 11
The
Culex
mosquito
(She is
hump-
backed)



FIG. 10
The
malaria
mosquito
(She
stands
on her
head)

spit glands and are injected into the person whom the mosquito bites. (Note. Male mosquitoes cannot bite.)

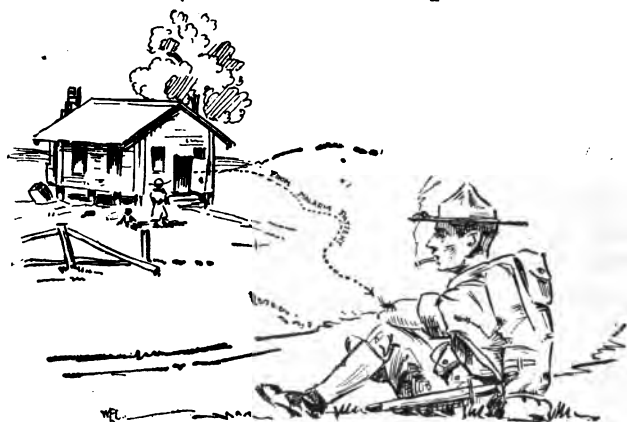


FIG. 12

Catching malaria

The malaria mosquito can get the germs any time she bites a person who has them in the blood and many persons have them long after getting well of the chills and fever. They are *carriers*. The malaria mosquito cannot give the germs to another person until they have passed through a period of about 12 days growth in her body. Then she can given them as often as she bites.

The yellow fever mosquito must bite the yellow fever patient *during the first three days of his fever*, for after that time the germs are not in his blood. She then must have



FIG. 13

Twelve days later

them develop in her for twelve days before her bite is deadly.

The only way that malaria, yellow and dengue fevers can possibly be caught is from mosquitoes.

Plague is a disease of rats, squirrels and other small fur bearing animals found in China, Hawaii, the Philippines, and in California, Idaho, Oregon, Washington and New Orleans. *The disease is carried by fleas* which bite the rat and then when the rat dies of plague the flea hunts another rat or some person in the house and bites him, giving him the germs.

Rocky mountain fever (spotted fever) is a disease of wild game in the northern part of Idaho and in the Bitter Root Valley in western Montana. It is carried to trappers, hunters, prospectors and others by ticks which infest the game.

Typhus fever is carried by body lice.

Sand-fly fever is carried by sand flies. It is found only in Asia and the Mediterranean Sea.

HOW TO AVOID DISEASES CAUGHT FROM BITING INSECTS

Malaria, yellow and dengue fevers. To avoid the diseases carried by mosquitoes we screen all houses with fine wire screens and use mosquito nets on the beds. Also, under certain conditions we take daily doses of quinine in malarious regions.

We kill the mosquitoes.

To do this we must know their habits.

Mosquitoes all lay eggs in water. These hatch out as *wigglers* or *larvae*, which have to come to the top frequently to breathe. In about twelve days or longer they turn into *tumblers* or *pupas*, which in a few days

longer come to the top when their backs split open and the mosquito comes out and flies away.

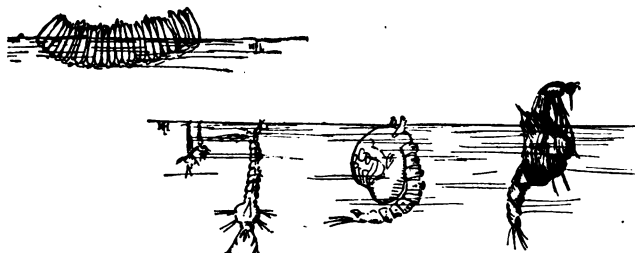


FIG. 14

*The eggs The larvae The pupa The mosquito leaving
the pupa skin*

The malaria mosquito is domestic like the chicken and lives around and in houses hiding in the grass, bushes or dark corners and comes out to bite at night. When a settlement is abandoned the malaria mosquito moves away also. She rarely flies far from home and is not found much beyond 500 yards from a house. She lays her eggs in running clear water preferably, but she will accept water in hollow trees, between the leaves of lilies or air plants or in vases of flowers, or in cisterns and water butts.



FIG. 15

On Guard

(No mosquito bites for him)

The yellow fever mosquito is domestic like the house cat. She hangs around the house and rarely flies as far as the next house even, preferring to travel on a visitor's coat. She will bite in the day time and will lay her eggs in any little collection of water in the house, the eaves

trough, the water barrel, old tincans or bottles, pitchers, vases or the refrigerator drip.

The dengue mosquito is a marsh and town mosquito. She flies far and well and will breed in any sort of water, even brackish.

To kill mosquitoes—

We catch them in the house.

We empty all water from tincans, old barrels, etc.

We cover with wire all cisterns and water barrels.

We fill in all puddles and drain off marshes.

We put oil on all pools and streams to choke the wrigglers.

We cut down grass and bushes around houses.

Plague is prevented by ridding the town or city or ship or building of rats by killing, trapping, closing up burrows, removing trash and rubbish and making concrete cellars and tin lined granaries.

Ships prevent rats from boarding by a tin shield around the ropes that fasten them to their docks.

Squirrels, weasels and woodchucks sometimes have plague. It is wise not to pick up dead squirrels, weasels or rats except with tongs.

DISEASES THAT CANNOT BE CAUGHT FROM OTHER PEOPLE OR ANIMALS

These diseases comprise injury done to the body in one of three ways:

By ill treatment.

By poisons.

By violence.

Any one suffering injury due to any one of these causes is not so able to fight off germs.

A healthy body prevents sickness. There are some persons who have never been ill in their lives because they have healthy bodies that are able to make antitoxins in sufficient amounts to meet and conquer germs and their toxins.

If, however, even the most robust and healthy person be starved, his body chilled, or overheated, or exhausted from fatigue and lack of sleep, or poisoned by alcohol or drugs, or his mind depressed by fear, worry or disappointment, or if he dwell in filth and foul air, he will readily become sick from some attacking germ.

A cur dog can worry an exhausted lion,—and so can small germs get the best of an exhausted man.

Taking care of the body is the best way to keep in good health.

HOW TO AVOID INJURING THE BODY BY ILL TREATMENT

The knowledge of taking care of the body is called *Hygiene*, and the rules, which are as follows, are very simple:

1. KEEP THE SKIN CLEAN.
2. KEEP THE BODY PROPERLY PROTECTED AGAINST THE WEATHER.
3. KEEP THE BODY PROPERLY FED.
4. KEEP THE BODY SUPPLIED WITH FRESH AIR.
5. KEEP THE BODY WELL EXERCISED WITHOUT EXHAUSTION.
6. KEEP THE BODY RESTED BY SUFFICIENT SLEEP.

7. KEEP THE BODY FREE OF WASTES.

8. KEEP THE MIND BUSY AND HAPPY.

Sanitation is the practice of the laws of Hygiene.

RULE 1. Keep the skin clean. A dirty body invites sickness. Small troubles such as chafing, sore feet, saddle boils, sore eyes, felons, whitlows, earache, toothache, carbuncles, fleas, lice and ringworms, are all caused by lack of cleanliness, and they put men on sick report.

Owing to excessive perspiration a daily bath with soap is desirable in summer and in the tropics, the year around. At least a weekly bath should always be taken when possible. When not possible to bathe, take a good rub daily with a dry towel.

Keep your feet clean with soap and water and put on dry socks before sleeping at night. Soiled socks should be washed and hung up to dry over night.

Keep your finger nails trimmed short with scissors or knife. Never bite them off. Keep them cleaned and keep your hands washed, especially at meal times.

Underwear must be washed in clean water, hot when possible and when soiled change as soon as possible.

Do not bathe or wash your clothes in dirty water. Bathing in water containing much alkali (hard water) or fine sand or mud will make the skin smart or chafe easily and cause sore eyes.

The hair of the head should be kept well-trimmed.

RULE 2. Keep the body properly protected from the weather. Clothing of the soldier is worn as a protection. Too much causes sweating and exhaustion on the march and too little causes chills and frost bite.

It should always be loose, not only because tight clothing interferes with the free and easy movement of the body, but especially because it slows the flow of the blood to the hands, feet and head, where it is most needed.

Do not rest in wet clothing nor let it dry on the body, if possible to change.

When resting after exercise or while doing guard at night, more clothing should always be put on.

When sleeping, especially in the tropics or hot weather, the belly must be protected from chilling by a flannel bandage or the shirt tucked into the drawers, or a pillow laid across.

Never sleep in a draught without covering.

It is wise to tie a handkerchief over the head and ears at night to prevent sore throat and earache.

Never sleep on the bare ground when you can sleep on branches, hay, or anything else.

When possible, in bivouac pick a dry place on high ground in the shelter of a hill or woods to lie down on.

In the heat of the summer and in the tropics keep out of the sunshine as much as possible, and when in it always wear your hat.

When bathing in the sun in summer or in the tropics always wear long sleeved shirts and drawers to prevent sunburn, which sometimes will cause dreadful blisters.

In winter time never ride when you can walk. Many have lost their feet from frost bite by riding in wagons instead of walking.

When it is very cold pull woolen socks over the shoes and then put on snow excluders or arctics, and at night wrap the feet in clothing, grass or straw to prevent freezing while asleep.

Be careful to rebutton the clothing in winter time after attending to Nature's calls. Cold fingers may make you careless, but the cold is merciless and may cause a bad frost bite.

The first feeling of frost bite is numbness and the first sign is a marble whiteness. Frost attacks first the nose, ears, cheeks, fingers and toes.

Sun glare and snow blindness may be prevented by colored goggles or a handkerchief tied across the face with a small slit for the eyes or by greasing the face and eyelids and rubbing in charcoal around the eyes.

RULE 3. Keep the body properly fed. Your company mess is sufficient for your needs and is wholesome, provided it is well chewed. Large lumps of food take a longer time to digest than small particles do, and so they tire the stomach and also cause constipation, gas and indigestion with headache.

Do not eat food left behind in strange houses or by the enemy, nor food that smells or looks badly.

If haversack rations are issued to you, do not eat them all at the first meal, but make a division for each meal. Stuffing will make you sick on a hike and later, hunger will drive you to eat things you would not touch at other times.

Before starting on the day's hike drink all the water you can and fill your canteen with water only.

Be sure your canteen does not leak.

After starting, do not drink anything until the end of the hike.

Do not eat ice or snow to quench thirst. It will make you more thirsty. Do not drink large quantities of cold spring water when heated,—it will give you a very bad bellyache.

Do not drink whiskey or beer, especially in the field. It will weaken you and favor heat exhaustion, sunstroke, frost bite and other serious troubles.

Alcohol muddles the mind and clouds thoughts, and so causes a feeling of carelessness and silliness that may ruin some military plan, or give the whole thing away to the enemy and with it the lives of yourself and your comrades.

The soldier who drinks alcohol will be among the first to fall out exhausted.

If you use tobacco, do not chew or smoke while marching. Tobacco is only a dope and increases the work of the heart.

A cup of hot coffee is a good stimulant.

RULE 4. Keep the body supplied with fresh air. The brain, kidneys and other internal organs require oxygen (a part of the air) continually, and if deprived of it for five minutes, the body will die. Therefore, it is easy to see that we must continually get plenty of fresh air into the lungs to supply the blood which carries the oxygen throughout the body. Except in winter time when steam-heated barracks are filled with sleeping men, it is not, as a rule, difficult to get all the fresh air we need. The air in a dormitory should smell sweet and clean, even though warm. Fresh air should be continually admitted in a way that will not throw a draft on any of the sleepers.

It is much better to sleep in a cold room with fresh air than in a hot stuffy one.

Fresh air not only prevents consumption, but it will cure mild cases of consumption without other medicines.

RULE 5. Keep the body well exercised without exhaustion. Exercise is absolutely necessary to good health. Lack of exercise of any set of muscles will cause them to grow flabby and weak. Outdoor sports are the best form of exercise, because they use all the body muscles, and are in the open clear air.

Exhaustion, on the other hand, not only weakens the muscles of the body, but it also lessens the vital forces and powers to resist germs.

RULE 6. Keep the body rested by sufficient sleep. Give the body enough sleep. Eight hours of uninterrupted sleep are enough for the average man, and you should always have that much in every twenty-four hours. Remember your comrades need it also; so, if you come in after taps, do not make a racket with slamming doors, heavy tramping, talking or whistling. And in camp be careful not to fall over tent ropes or step on other sleepers. Do not drink coffee at night,—it will keep you awake and rob your body of needed rest.

When on the march take advantage of every halt to rest your body. As soon as the command is given to fall out, select, if possible, a good dry place on the side of the road to sit or lie on. If carrying the pack, loosen it and rest back on it, in a sitting or lying position. If the march has been a long one, lie flat on your back and raise the feet in the air. This is a quick way to remove the heavy dragged feeling of the feet and legs and to rest the heart, because the blood runs out of the legs into the body.

RULE 7. Keep the body free of wastes. Get into the habit of emptying the bowels at a certain

hour each day. Immediately after breakfast is a good time. This is a habit that can be cultivated just like any other habit. Cultivate it. It will do much to keep you in good health.

Always empty the bowels and bladder, especially the bowels, whenever you have the least desire to do so. Do not allow a little personal inconvenience or laziness to prevent you from doing this. The wastes from the bowels and bladder, especially the bowels, are poisons that should always be expelled from the body just as soon as possible.

The free drinking of water flushes the bladder and helps to loosen the bowels. A glass of hot water soon after reveille will not only help to loosen the bowels, but it will also benefit the stomach and flush out the bladder. Some people drink a big glass of water, either hot or cold, every morning before breakfast.

Proper physical exercise and eating ripe or cooked fruits will also do much to keep the bowels open.

Pressing and rubbing *downward* with the left hand on the lower *left* side of the belly will do much to induce a movement of the bowels.

Most constipation comes from swallowing food in large chunks, drinking large quantities of cold liquids with the meals and eating heavy articles of diet, such as, beans, fried pork, hot bread.

Do not get into the habit of using laxatives to keep the bowels open. Their continued use is injurious. Use the natural means suggested above.

The constant moderate use of alcohol injures the kidneys and when they become too weak to work and

throw off the waste, a deadly disease, called "Bright's Disease," results.

RULE 8. Keep the mind busy and happy. The amusements of the post, fort or camp should be patronized. Visit the company recreation room and library, the post library, post exchange, movies and the gymnasium, and indulge in baseball, bowling, etc.; also in swimming, when possible.

When tired of these amusements and recreation, apply yourself to some line of study. The post school is for that purpose. The chaplain and your company commander may start you upon a career that may become of great advantage to you in the service and after you leave it.

And don't forget to write home. Your letters will give you satisfaction in writing them, and will afford pleasure to your people, and the replies will keep you in touch with home, the source of the best associations of life.

Never loaf, keep busy and you will keep happy and out of sickness and trouble.

HOW TO AVOID INJURING THE BODY WITH POISONS

The surest way to speedily injure the body is by using poisonous drugs.

Some poisons are so agreeable, even though deadly, that persons with weak characters and no grit will persist in their use until a habit is formed, which kills them.

Such poisons as tobacco and alcohol take longer to kill; and they are sneaks doing damage in unseen places.

Such poisons as opium, taken in the form of smoke; morphine taken as a pill or injected into the flesh with a needle syringe; cocaine taken as a snuff; chloral taken in water; wood alcohol taken in cheap liquors and in essence of ginger; ether and chloroform breathed in,—these are all poisons which form most injurious habits or kill rapidly, but before killing the man they make a feeble, miserable wretch of a pauper of him, ruined in health, blind, or insane,—the kind of a creature that commits the crime of murder or suicide.

Not one of these drugs mentioned is necessary to good health. Most of them are safe only when used for the purpose intended and by a physician, and some, such as alcohol and tobacco, have no excuse at all for being used as a pleasure.

The habit of taking patent medicine is a dangerous one, as many of them contain deadly drugs in dangerous quantities, even though labelled harmless.

HOW TO AVOID INJURING THE BODY BY VIOLENCE

The prevention of accidents in civil life does not concern us here. The prevention of accidents of military life through actual combat is the earnest study of all military men and the aim of all from the commanding general down. These will be taught by your company commander.

The greatest cause of accidents is carelessness; the next greatest is "showing off," and both are often the result of alcohol.

Neither carelessness nor bravado has any place in the military service. Remember that bravery and "showing off" are two opposite things.

CHAPTER VIII

CAMP SANITATION

By "Camp Sanitation" we mean what we must do to take care of the health in camp, where we have not the comforts and sanitary conveniences of barracks. In camp the comforts and sanitary conveniences of barracks (toilets, bath-rooms, sinks, running water, etc.) are replaced by various substitutes called "Camp expedients" (latrines, incinerators, urinal tubs, etc.), which are designed to promote, secure and preserve the health and comfort of the troops.

Everything must be done to prevent the existence of conditions that will cause stinks and be favorable to the breeding of flies and mosquitoes, the two great carriers of disease. Therefore, we see the vital importance of cleanliness,—absolute cleanliness,—of body, clothing, equipment, tents, ground, sinks, kitchen, etc.

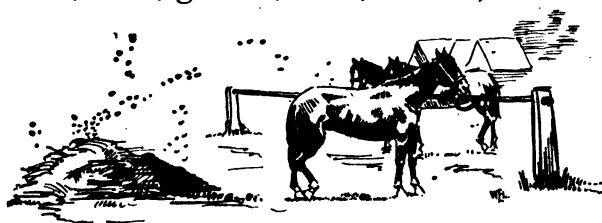


FIG. 1
Flies breeding on the picket line

Your tent must be kept clean and in order. When possible clean your shoes before entering your tent in muddy weather.

The company street and the ground around all tents must be kept clean. Do not throw food, slop water, rags,

paper, empty tin cans, or other trash and refuse on the ground, but put them in the box, the can or other receptacle provided for the purpose or throw them into the kitchen incinerator (the place prepared for the burning of trash and refuse).

Do not defile the company street or camp grounds by spitting, blowing the nose, urinating or moving the bowels there. All these things transfer germs that are liable to cause disease.

Spit in a fire when you have to spit.

Blow the nose in a piece of paper that can be burned or a handkerchief that can be boiled.

Use the urinal tub at night and the latrine by day. If an open trench is used as a sink, always cover your excrement with dirt. If the sink is inclosed by a box with stool-covers, always put the covers down as soon as you are through so as to keep the flies out.

Kitchen garbage must be burned in a pit by the kitchen or put into *covered* cans for hauling away. *The covers must be kept on the cans at all times*, so as to keep out the flies.

Do not ride horses through camp except on the roadways.

The camp is no place for dogs. When you go into the field leave the company dog back in the post, and do not pick up any stray dog on the march. All stray dogs following troops should be shot. Dogs defile the camp, —often spoiling rations in the store-tent, and they easily convey diseases, especially rabies (hydrophobia). A mad dog (that is, one that has rabies) is at first affectionate and then becomes delirious, when he snaps at everything and runs until exhausted.

It is dangerous to pick up tired out or sickly looking dogs, or to fondle strange ones.

Keep the inside of your tent dry and free from odors, —so, in pleasant weather always have your tent walls raised, and air your blankets and extra clothing often.

It is a very natural thing to try and stop up all crevices in and under the tent in cold weather. This will make the tent close and stuffy at night and you will wake up feeling tired, stiff, heavy and possibly with a headache, all due to insufficient fresh air.

In cold weather heat the tent and wrap up warmly and be sure to let in fresh air, preferably through the door.

As soon as your tent is pitched, ditch it. When it rains loosen the guy ropes to prevent the pegs from pulling out and the tent collapsing.

Clean your body and your clothes daily as thoroughly as the means at hand will permit. Never lose an opportunity of taking a bath or of washing your socks and underclothing. A bullet passing through dirty clothes will often cause a seriously infected wound which would otherwise be comparatively harmless.

In the morning wash the face and neck with cold water. Don't forget to use your toothbrush afterward.

The feet should be bathed or mopped with a wet towel every evening to invigorate the skin. Dirty feet invite blisters.

The feet should be kept clean and the nails cut close and square. An excellent preventive against sore feet is to wash them every night in hot (preferably salt) water and then dry thoroughly.

Rubbing the feet with hard soap, grease or oil of any kind and putting foot powder in the shoes before starting on a march are also good.

A little alum in warm water is excellent for tender feet.

Blisters should be pricked and the water let out, but the skin must not be removed. Adhesive plaster on top of the blister will prevent the skin from being pulled off.

In the continued absence of opportunity for bathing it is well to take an air bath and moist or dry rub before getting into fresh underclothes.

If the lack of opportunity to wash clothes continues for any length of time, soiled clothes and bedding must be frequently exposed to the sun and air. Sunshine is a good germ killer.

Keep the body protected against the weather. Do not run out at night in the cold in your undershirt nor in your underwear.

In cold weather do not go around without an overcoat just to show how foolish you are.

Do not go without a hat in the tropical sun.

Wet clothes should be changed at the first opportunity. Never let wet shoes dry on your feet over night.

In cold weather make your bed on the ground on straw, leaves or branches for warmth. In warm weather bunks are preferable.

Never sleep on the bare ground, especially damp ground, when you can get hay, straw, grass, leaves, branches or anything else.

Before going into the field see that your clothing is in good repair, all buttons are on, your underwear in

good condition, your socks have no holes, and that your shoes are sound and strong, and have hob nails. Do not have the soles literally covered with nails, but have them put in as shown in the illustration.

Carry an extra pair of shoe laces. A broken lace will loosen the shoe which will soon cripple you.

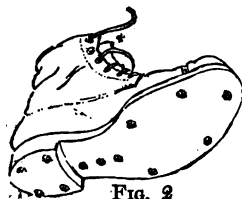


FIG. 2

Always wear woolen socks to march in. Cotton socks cause blisters.

Wear shoes that fit and keep them soft with grease.

Under no circumstances should a soldier ever start off on a march wearing a pair of new shoes.

Be sure to have some needles and pins in a well-corked bottle (to keep them from rusting), some coarse thread, some buttons, a pair of small scissors, a string, an awl and a small knife.

Keep the body properly fed. Do not eat all of your day's ration at the first halt and do not buy fruit and pies from peddlers, but eat what comes from your company kitchen.

In the company kitchen there should not be a single fly on the food although there may be flies in camp. Food must be kept screened or covered until served, and not served until ready to be eaten.

Neither the cook nor his assistants should have any infectious diseases. If they have, especially gonorrhœa and "walking typhoid" and even trivial ailments, they should be treated by a medical officer at once.

If you are the company cook, keep everything in your kitchen and mess tent clean with hot water and

soap. Boil your utensils and dish rags. Throw all your slops and garbage into your kitchen incinerator.

Stable sweepings if well dried and mixed with twigs, leaves and rubbish will make fuel and save kindling wood.

Exercise is not done at the discretion of the soldier when in the field. Nevertheless, in periods between military engagements or maneuvers exercise in games and sports keeps a man fit and is a pleasure.

Rest and sleep are most important for a soldier in campaign. Keep the body rested by plenty of sleep. Do not join idle parties going to walk the streets of the nearest town at nights, nor sit up late playing cards, nor wander in native towns after dark.

CHAPTER IX

FIRST AID TO THE SICK AND INJURED¹

In offering first aid to a comrade the main things are:

1. Act promptly.
2. Keep cool.
3. Make the patient feel that you have no doubt that you can pull him through all right.
4. Don't let him become discouraged. Pluck has carried many a man through what seemed the most forlorn hope.

In administering first aid proceed as follows:

1. Find out what the real trouble is.
2. Decide promptly what treatment is necessary.
3. Make the patient as comfortable as possible and handle him gently. However, do not handle him unless it will do him a benefit.
4. To facilitate the treatment, remove the clothing, cutting it or ripping it, where necessary.

Asphyxiation (suffocation) by Gas. Asphyxiation by gas is treated the same as in the case of drowning, omitting, of course, the operation of getting the water out of the body.

Belly-ache. See "Cramps."

¹ Because of its growing importance, the subject of *First Aid to the Sick and Injured* is treated in this chapter much more fully than in the *Soldier's Handbook*, which covers only wounds, bleeding, fractures, snake bites, rabid dog bites, shock, fainting, poisoning, drowning, sunstroke, burns, freezing and frost bites. In this chapter these subjects are marked with an asterisk (*). They are the only ones about which inspectors usually question soldiers.

*Bite of dog. }
*Bite of snake. } Either requires immediate and
herioc treatment. *Lose no time.*

1st. Prevent the poison from traveling toward the heart and brain by putting on at once a tourniquet between the wound and the heart.

2nd. Suck the wound and be sure to spit out the poison and rinse the mouth afterward. It is safe, if you have no cuts or sores on the lips or in the mouth.

3rd. Enlarge the wound with a knife (in the direction of the bone, not across) to make it bleed more freely, and again suck the wound.

4th. Apply to the wound any strong acid or caustic, such as carbolic acid, lime, wood ashes or tincture of iodine, or burn it with a hot iron. Telegraph wire will do.

5th. Wash out the wound with hot water and pack with equal parts of baking soda and salt, and apply a bandage.

6th. Then, in the case of a snake bite, loosen the tourniquet little by little, taking about half an hour so as to permit any poison that may remain in the wound to be *gradually* absorbed by the blood. In the case of a dog bite, the tourniquet is loosened at once.

After the tourniquet has been removed, the patient must rest quietly for several hours. If he feel faint, he may have a stimulant,—alcohol, coffee or tea,—*but do not give the stimulant before the poison has been removed from the wound*, because stimulants increase the heart beats and thereby hurry the poison into the blood.

A person bitten by a mad dog must take the Pasteur treatment at the earliest opportunity.

If the dog is not mad (rabid), the wound does not need treatment different from any other kind of a wound.

It is sometimes not possible to decide off hand whether a dog is sick with rabies or has fits from heat,—therefore, when bitten by a dog do not kill him; but chain him up where he cannot bite others and watch him. If he dies, his brain should be examined by a doctor for germs of hydrophobia. If he had hydrophobia, then there is still time for successful Pasteur treatment. If he did not have it, then the patient's mind is much relieved and nothing further need be done.

When bitten by a snake, kill it, if possible, and have it shown to a doctor for examination.

***Bleeding.** The following comparison between the blood and the water in a city will enable you to understand easily the question of bleeding:

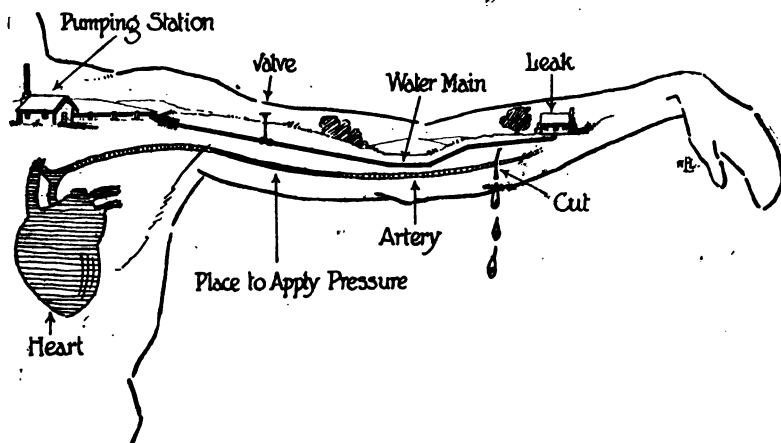


FIG. 1

The {water
blood} flows from a pump called {waterworks
heart} through {rigid pipes
elastic tubes} called {watermains
arteries}. When there is {a leak
bleeding} the {plumber
doctor} stops the flow of the {water
blood} by {turning a key valve
pressing the blood tube shut} between the {waterworks
heart} and the {leak
bleeding cut} and then proceeds to repair the leak {by soldering
by sewing or by bandaging}. He then turns on the {blood} by {opening the valve
removing pressure} in the water main
on the blood tube.



FIG. 12

Pressure with thumb at 1 checks bleeding of left side of chin, cheek and jaw.

Pressure at 2 stops bleeding from big blood tube on left side of head and neck and face.

Pressure at 3 controls bleeding in the arm pit and shoulder.

Pressure at 4 checks bleeding in arm pit and anywhere down the arm and hand.

Pressure at 5 stops bleeding of arm and hand.

Pressure at 6, on either leg, stops bleeding of leg and foot.

The following diagram shows where pressure with the thumb will squeeze the blood tube between the thumb and the bone.

In addition to the pressure raise the leg or arm or head above the heart. This will slow the flow of the blood and lessen leakage.

However, one cannot hold the thumb forever on the blood tube, so we make an artificial thumb, called a *tourniquet*, which is a pebble or other hard object wrapped in some soft material (to prevent injury to flesh), which is pressed down on

the blood tube and held in place by a strip of any material which can be tied so as to keep up the pressure.



The pebble



The pebble wrapped to protect the flesh



The bandage tied around over the pebble



The bandage twisted tightly by means of a windlass (stick) which is held by another bandage



This shows pressure applied by tourniquet (also called spanish windlass) instead of the hand and by direct pressure of the First Aid Packet

FIG. 2

A tourniquet, therefore, is like the valve in a water main.

These diagrams show how a tourniquet is applied.

When no one is around to assist you, sometimes it will be possible to plug the wound in your own body with the first aid packet or with your thumb or handkerchief.

When the bleeding is slight, or is from the scalp or palm of the hand, or sole of the foot, direct pressure upon the wound itself with the pad of the first aid package will often be sufficient to stop the leak.



FIG. 3
*Bandage to
stop bleeding
in arm*

Nature when left alone stops the leaks with her own solder, called blood-clot, which forms in the cut ends of blood tubes and corks them or seals them up until a scar forms a permanent seal.

When bleeding is inside the body (and unseen), in the chest or belly, we know it first by the evidence of the wound and second by the great paleness and faintness of the patient.

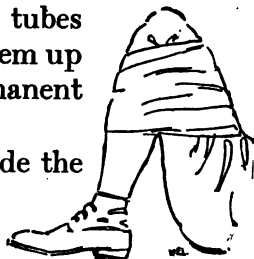


FIG. 4
*Bandage to stop bleeding
in foot*

What should you do for unseen internal bleeding? Let the patient lie flat and notify a doctor. Furthermore, let the patient alone; and don't let others touch him.

Should he be allowed to sit up or move? No. Why? Because it will quicken the heart and increase the leak and so hasten the patient's death.

If he has fainted, should you revive him with cold water, ammonia, alcohol, hot coffee, slapping the face, etc.? NO. Why? Because all these things will make him bleed to death faster.

Remember, fainting is nature's best remedy, because it slows the leak, quiets the patient and so lessens the bleeding.

In any case of bleeding *never give stimulants until after the bleeding has been stopped.* When the bleeding has stopped get a doctor.



FIG. 5

Arm blown off at elbow

NOTICE:

1. Bandage on stump.
2. Tourniquet below to check bleeding.
3. Arm held upright to lessen bleeding.
4. Strap supports arm and also acts as a tourniquet.

tourniquet, but plug the wound first.

What is the other danger? Injury to nerves from pressure which may cause palsy (paralysis). However, that will pass off after a few days.

***Broken Bones (Fractures).** A broken bone or fracture is known by pain in a particular place that hurts on movement or when touched. Also, by a deformity or a movable lump, caused by the broken end of the bone.

What is the danger of not handling a broken bone properly? Careless handling may cause the broken ends

What are the dangers from a tourniquet? First, gangrene, that is, the death of a limb. What causes gangrene? The limb dies from lack of blood, which has been cut off by the tourniquet.

How do you know when to remove the tourniquet in time to prevent gangrene? Watch the toes and finger tips. If they become blue-black and remain white when pinched loosen the

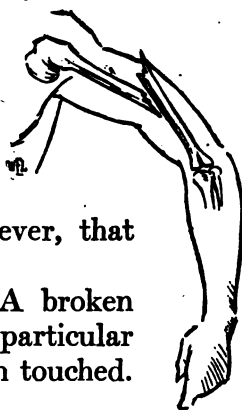


FIG. 6

Compound fracture

to pierce the flesh and stick out through the skin. This is called a **compound fracture**, and is serious, because it adds fuel to the fire by making a doorway for germs to enter, which may cause death or the loss of the limb. Furthermore, careless handling may make the bones grow together in a bad position, causing a deformity.

The best way to treat a broken leg or arm bone is as follows:



*Break of UPPER arm bone.
Pulling the broken bones out
of the flesh and into place*



*Treatment for break of upper
arm bone*

1. Padding of grass.
2. Splints put on **FRONT** and **BACK**.
3. Splints extend beyond elbow joint.
4. Arm is supported by a sling.



*Treatment for break of both
bones of lower arm*

1. Plenty of grass padding to protect the flesh.
2. The splints are put **FRONT** and **BACK** and bound snugly. The hand is included.
3. The whole dressing is held up by a sling.

FIG. 7

Pull until the ends come together. You can tell this by the relief the patient feels and by the limb assuming

its proper length,—that is, the same length as the other side.

To keep the ends of the bones in place, fasten to the limb two boards or any other substance that will not bend. Such boards or other substance are called *splints*. They act as artificial bones. All splints should be well padded with some soft material like raw cotton, cotton waste, grass (be sure the grass contains no biting insects), leaves, hay or excelsior, to prevent pressure of the soft flesh on the ends of the bones.

When the thigh bone is broken, put a splint from the arm to the ankle and use the other leg as a splint. Fasten them by bandages, belts, gun sling, etc., passed around the chest, waist, hips, knees and ankle.

When an arm is put in a splint, hang the hand and forearm in a sling. It will give much relief.

When the jaw is broken, the upper jaw makes a good splint.

When the collar-bone is broken this makes a good treatment: Fig. 9.



FIG. 8

Points to note:

- Plenty of grass between the legs.*
- Plenty of grass between injured leg and splint.*
- Splint extends from arm pit to foot.*
- The other leg is used for a splint.*
- Plenty of strapping to keep leg quiet.*

**Broken collar bone**

The left collar bone is broken. Therefore, pull BOTH shoulders backward away from the breast bone (same action as for broken arm bone) and hold in position with bandage or straps.

**Broken collar bone (left side)**

When the shoulders are pulled back then the hand is bound close to the chest high up. This prevents it from flopping and so twisting the broken ends of the collar bone.

FIG. 9

A broken rib is treated by putting a wide strap or bandage around the chest and drawing it tight while all the air is breathed out.

**FIG. 10****Treatment for broken ribs, left side**

The patient breathes all the air out of the chest and at that moment the strap is buckled tightly. This prevents the broken ends of the ribs from tearing the flesh or the lungs. Notice the roll of shirt which acts as a pad.

This keeps the rib quiet and the man will breathe with his belly instead of his chest.

A broken skull usually makes a man unconscious and may cause death. It is recognized by a wound or swelling of the scalp and a dent in the skull. A doctor should be called at once. Always examine an unconscious man for injury to the head.

***Burns.** If clothing sticks to the burn, do not try to remove it, but cut around it. Prick blisters at both ends with a perfectly clean needle, and

remove the water by gentle pressure, being careful not to break the skin.

A good application for a burn is carbolic acid dissolved in water (a teaspoonful in a pint of water), or tincture of iodine dissolved in water (one teaspoonful in a pint of water, to which is added as much salt as will cover a dime), or olive oil, vaseline or butter.

Lacking the remedies named above, ordinary *baking* soda or flour may be dusted on the unbroken skin, or a cloth dampened with salt water that has been boiled, to which may be added the same amount of whiskey or brandy as there is water.

Another application for burns recommended by some, is the scraping of a raw potato, renewed when it feels hot.

Different burns should be treated as follows:

Sunburn,—treat with olive oil, vaseline or butter, or with glycerine or witchhazel, applying with a dampened cloth.

Quicklime or lye,—treat with vinegar.

Carbolic acid,—treat with alcohol.

Other acids,—treat with baking powder or lime water.

Burning clothes, particularly that of women and children, has been the unnecessary cause of many horrible deaths, either from ignorance of the proper means of extinguishing the flames, or from lack of presence of mind to apply them. A person whose clothing is blazing should (1) immediately be made to lie down—be thrown if necessary. The tendency of flames is upward, and when the patient is lying down, they have not only less to feed upon, but the danger of their reaching the face,

with the possibility of choking and of ultimate deformity is greatly diminished. (2) The person should then be quickly wrapped up in a coat, shawl, rug, blanket or any similar article, preferably woolen, and never cotton, and the fire completely smothered by pressing and patting upon the burning points from the outside of the envelope.

The flames having been controlled in this way, when the wrap is removed, great care should be taken to have the slightest sign of a blaze immediately and completely stifled. This is best done by pinching it but water may be used. Any burns and any prostration by shock should be treated in the manner prescribed for them.

Bruises. The best treatment for a bruise is heat.

A hot brick or a bottle of hot water wrapped in cloth, towels wrung out of hot water, or even an electric light bulb, will give much relief.

However, always remember this: Never put the hot object on the bare skin—always wrap the source of heat in a thick cloth to hold the heat in and at the same time protect the skin. If not practicable to do this wrap the source of heat, then spread a towel over the skin before applying the hot object.

If you use an electric bulb, watch it closely, as it will char and possibly set things on fire.

The above treatment is also excellent for lumbago, stiff neck, and stiff muscles.

A tub bath as hot as you can stand it is fine for refreshing tired, stiff muscles. It is also good for lumbago.

Chiggers. Apply kerosene oil. Bacon is also excellent, and so is butter or lard with salt.

Choking. Foreign body in the throat. The common practice of slapping the back often helps the act of coughing to dislodge foreign bodies in the windpipe.

If this does not succeed, have the patient lie over a chair with his head down low or hold him as in the first step to revive a drowning person and have him cough. When in either of these positions have some one slap him on the back so as to induce coughing.

The above failing, give him a large amount of warm water with a little salt, mustard or baking soda in it, and then have him put his finger in his throat so as to induce vomiting which will often bring up the obstruction.

In children, and even in adults, the expulsion of the body may be facilitated by lifting a patient up by the heels and slapping his back in this position.

If none of the methods above described are successful, summon a physician, taking care to send him information as to the character of the accident, so that he may bring with him the instruments needed for removing the obstruction.

Colds. Put on warm, dry clothing. Wash the nose inside and gargle with hot salt water. Drink freely of hot ginger tea; cover well at night; loosen the bowels.

Concussion of the brain is treated the same as in the case of internal bleeding. Keep the patient quiet, lying on his back, with clothing loosened. Get a doctor.

Coughing. A hot gargle of salt water, some of it sniffed into the nose, will frequently relieve a cough due to mucous in the throat. A plaster of mustard, flour and vinegar made into a paste, and applied on a piece of cloth

on the chest, just below the neck, will relieve a throat cough.

Breathing in steam from a bucket of hot water containing vinegar is good.

Cramps. Mix pepper and ginger, or tobasco, or Worcestershire sauce in very hot water and drink. Also, hot ginger ale or hot water containing a teaspoonful of witchhazel is good.

Repeat about every hour.

Apply hot bandages to the belly. A hot stone or bottle of hot water wrapped in cloth, makes a good warmer.

Take a purgative, which will usually expel the offending cause, generally too much undigested food.

Cuts. Small cuts should be treated with tincture of iodine or washed with alcohol (bay rum or listerine will do) and bandage up. Large wounds may be similarly cleaned and then closed by adhesive plaster.

Diarrhœa. Apply warm bandages to the belly. Some woodsmen recommend the following: Fire brown a little flour to which two teaspoonfuls of vinegar and one teaspoonful of salt are added; mix and drink. They claim this is a cure nine cases out of ten. A tablespoonful of warm vinegar and teaspoonful of salt will cure most severe cases. Also, hot ginger ale or hot water containing a teaspoonful of witch hazel is good. Repeat any of the above drinks about every hour.

Take a purgative, which will usually expel the offending cause, generally too much undigested food.

Dislocations. The place where two bones come together is called a joint.

When two bones forming a joint are knocked apart, it is called a *dislocation*, and the bones are said to be *out of joint*.

The first sign of a dislocation is the accident.

The second sign is immediate interference with the motion of the joint and awkwardness in using the limb.

The third sign is deformity of the joint,—it looks queer when compared with the same joint on the other side.

The following diagrams show the usual methods of replacing dislocations:

To put the arm bone back into the shoulder socket



1ST MOVE

Rest your weight at elbow, pulling downward, until the muscles at the shoulder are tired and will stretch.



2ND MOVE

Swing the elbow across, close to the chest, and place the hand on other shoulder.



3RD MOVE

Keep the elbow close to the chest and bring the hand forward as if held out for a penny. This should twist the bone into the socket.

Relocating the jaw



When the jaw bone is out of place, the man cannot shut his mouth.

Put both thumbs (protected by a handkerchief) on the lower teeth and with the forefingers at the angles of the lower jaw push down in the back of the jaw.

Relocating thumb



When the thumb bone is dislocated it must be PUSHED into place—not pulled.

Relocating finger



Pull the finger bone back into place.

If you are unsuccessful after trying several times to replace a dislocation, get a doctor.

If no doctor is available, make the man sick by having him drink some warm salt water and then put his finger in his throat.

When he vomits the muscles and ligaments (tissue connecting the joints) will relax and you may be able to get the bone back in place.

After replacing the bones put the joint at rest with a large compress and bandage.

When uncertain as to whether you have to deal with a broken bone or a dislocated joint, give treatment for a broken bone, because rest and quiet for the injured part are good in either case.

***Drowning. Rescuing.** Approach the drowning man from behind, seizing him by the coat collar, or a woman by the back hair, and tow at arms length to boat or shore. Do not let him cling around your neck or arms to endanger you. Duck him until unconscious if necessary to break a dangerous hold upon you; but do not strike to stun him.

A drowning person *does not* come to the top three times before giving up.

Reviving. When a person is apparently drowned he is unconscious and not breathing because his lungs are full of water and his skin is blue and cold because no air is getting into his blood to redden it and warm it; *remember* the heart does not stop until some time after the breathing stops. If we can get air into the blood and start breathing again before the heart stops we can save the patient's life. If we cannot get the breath started in time the heart stops and the patient is then dead.

Our problem then is this:

1. To get the water out of the lungs.
2. To get the air into the lungs and start the man breathing before the heart stops.

Emptying the lungs is precisely similar to emptying a bottle.

The lungs are the bottle, the wind-pipe is the neck of the bottle and the cork of the bottle may be the tongue turned back in the throat or mud and leaves from bottom of the pool and bloody froth in the nostrils. We therefore—

1. { Pull out the cork.
Remove mud, mucus, etc., and pull the tongue forward.



FIG. 13
Pulling out the cork

2. { Turn the bottle neck down to pour out the contents.
Place the patient's head lower than his chest so the water will run out.

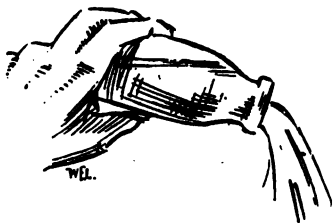


FIG. 14

Then lay the patient on a blanket, if possible, and on his stomach, arms extended from his body beyond his head, face turned to one side so that the mouth and nose do not touch the ground. This position causes the tongue to fall forward of its own weight and so prevents it from falling back into the air passages. Turning the head to one side prevents the face coming into contact with mud or water during the operation.

Kneel and straddle the patient's hips, facing his head.

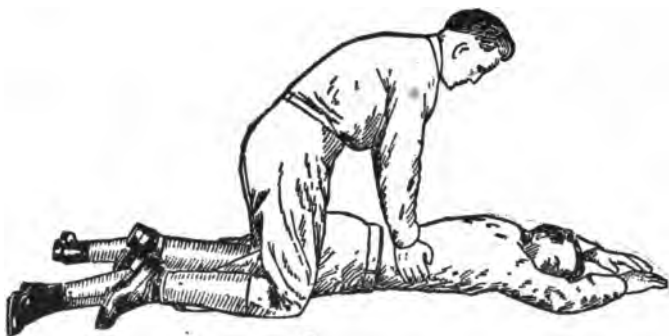


FIG. 15

Roll up or rip off the clothing so as to get at the bare back.

Locate the lowest rib, and with your thumbs extending in about the same direction as your fingers, place your spread hands so that your little finger curls over the lowest rib. *Be sure to get the hands well away from the back bone,*—the nearer the ends of the ribs the hands are placed without sliding off, the better it is.

Then with your arms *held straight*, press down **SLOWLY AND STEADILY** on the ribs, bringing the weight of your body straight from your shoulders. *Do not bend your elbows and shove in from the side.*

Release the pressure suddenly, removing the hands from the body entirely, and thus allowing the chest to fill with air.

Wait a couple of seconds, so as to give the air time to get into the blood. This is most important.

Repeat the pressure and continue doing so, slowly and steadily, pressing down at the rate of ordinary breathing. That is to say, pressure and release of pressure (one complete respiration) should occupy about five seconds. Guide yourself by your own deep, regular breathing, or by counting.

Keep up for at least one hour the effort to revive the patient; and much longer if there is any sign of revival by way of speaking, breathing, coughing, sneezing or gurgling sounds.

Do not stop working at the first signs of life, but keep it up until the patient is breathing well and is conscious. If you stop too soon he may stop breathing and die.

Persons have been revived after two hours of steady work, but most cases revive within about thirty minutes.

If you are a heavy man, be careful not to bring too much force on the ribs, as you might break one of them.

In the case of women or thin persons place a roll of clothing under them at the waist line before beginning the pressure.

If you happen to be of light build and the patient is a large, heavy person, you will be able to apply the pressure better by raising your knees from the ground, and supporting yourself entirely on your toes and the heels of your hands, properly placed on the floating ribs of the patient.

Do not attempt to give liquids of any kind to the patient while he is unconscious, for he cannot swallow them. They will merely run into his wind-pipe and choke him, and, furthermore, it will take up valuable time.

However, after the patient has regained consciousness you may give him hot coffee or hot whiskey, punch or aromatic spirits of ammonia (a teaspoonful in water).

Then wrap up the patient warmly in hot blankets with hot water bottles, and take him to the nearest hospital or put him to bed and send for a doctor. Why? Because the dirty water in the lungs has damaged the lining and the patient is in danger of lung fever and needs care and nursing.

Aromatic spirits of ammonia may be poured on a handkerchief and held continuously within about three inches of the face and nose. If other ammonia preparations are used, they should be diluted or held farther away. Try it on your own nose first.

The above method of artificial respiration is also applicable in cases of electric shock, suffocation by gas and smoke.

Drunkenness. Give large doses of vinegar and water to which some ammonia has been added. Taste before giving. If too sour, add ammonia; if too much ammonia, add water.

Aromatic spirits of ammonia,—a teaspoonful in half a cup of water, repeated every fifteen minutes, is also a good remedy.

Cause vomiting by tickling the throat with the finger. Follow by a hot sweat bath and forced exercise.

A cup of hot coffee after vomiting will aid to settle the stomach and clear the mind.

Cold water dashed into the face or a cold shower has a sobering effect.

Earache. Put a teaspoonful of salt into a quart of water and add 6 teaspoonsfuls of tea. Boil it. As soon as it is cool enough to stand the finger, drip some into the nostrils until it falls into the throat. Clear out the nose and throat by sniffing,—*do not blow* the nose,—and then gargle with the rest of the remedy as hot as can be taken, holding each mouthful well back in the throat. This will often open up the tubes running from the ears to the throat, and relieve the pressure against the ear drum. In addition, a little hot oil may be dropped into the ear. Repeat the treatment in one half an hour if not successful first time.

Ear, foreign body in. Lay the head over, with the affected ear up, and pour in some warm oil or soap suds. This will float the thing up, unless it be a vegetable such as a grain of corn or a bean. Turning the affected ear down and then jumping, jerking the head, or pounding it gently, may dislodge it.

A little peroxide of hydrogen poured into the ear will often dislodge the substance, especially if it be wax.

In case of an insect, a bright light held near the ear will often cause it to leave the ear to go to the light.

Electric Shock. Failure of respiration following an electric shock by lightning or live wire is treated the same as in the case of drowning, omitting, of course, the operation of removing the water out of the lungs.

Do not try to pull a man away from a live wire until you have put on rubber overshoes or gotten a *wooden* stick with which to get the wire away from him. Otherwise you will yourself get a shock.

Eye, foreign body in. Close the eye for a few moments and allow the tears to fill the eye; upon opening it, the body may be washed out by them.

Never rub the eye.

The foreign body can often be removed by keeping the eye open with one hand and splashing water into it with the other, or by dipping the eye into clean water while holding the eyelid open with the hand.

If the body lies under the lower lid, make the patient look up, and at the same time press down upon the lid; the inner surface of the lid will be exposed, and the foreign body may be brushed off with the corner of a handkerchief.

If the body lies under the upper lid, (1) grasp the lashes of the upper lid and pull it down over the lower, which should at the same time, with the other hand, be pushed up under the upper. Upon repeating this two or three times, the foreign body will often be brushed out on the lower lid. (2) If this fails, the upper lid should be turned up; make the patient shut his eye and look down;

then with a pencil or some similar article press gently upon the lid at about the middle, and grasping the lashes with the other hand, turn the lid up over the pencil, when its inner surface will be seen, and the foreign body may readily be brushed off.

If the body is firmly stuck in the surface of the eye, a careful attempt may be made to lift it out with the



point of a needle. If not at once successful, do not try again, as you may injure the sight.

Lime, plaster or whitewash in the eye should be washed out with a very weak mixture of vinegar and water. Acids in the eye may be washed with baking soda in water. Olive oil will also afford relief.

After the removal of a foreign body from the eye, a sensation as if of its presence often remains. People not infrequently complain of a foreign body when it has already been removed by natural means. Sometimes the body has excited a little irritation, which feels like a foreign body. If this sensation remains over night, the eye needs attention, and a surgeon should be consulted; for, it should have passed away, if no irritating body is present.

After the removal of an irritating foreign body from the eye, salt water should be poured into it, then butter, lard or olive oil may be used for a salve.

Eyes, sore or inflamed. If possible, see a doctor at once. If none be available, add to a quart of water a heaping teaspoon of salt and six of tea (preferably green tea), and boil for five minutes. While still hot bathe the eye every half hour, then bathe every hour for several hours. If the eye remain red after relief is obtained, make the eyewash ice cold.

Another remedy is to bind on cloth soaked with witch hazel and leave on over night. Wash well in morning with warm water.

Famishing. Do not let a starved person eat much at a time. Prepare some broth, or a gruel of cornmeal or oatmeal thoroughly cooked, and feed but a small spoonful, repeating at intervals of a few minutes. Give very little the first day, or there will be bloating and nausea.

Fatigue, excessive. Take a stimulant, or hot drink when you get to camp (but not until then), and immediately eat something. Then rest between blankets to avoid catching cold.

Feet, sore and blistered. See bottom page 157.

Fevers. See the doctor.

Fish Hook. If a fish hook gets caught in the flesh, push it on through and when the end sticks out, break off the hook and pull it out the other way. Put tincture of iodine on the wound and bandage.

Fits. The man falls over suddenly unconscious in a convulsion, which continues until he is blue in the face, when he gradually quiets down and regains consciousness. He is liable to injure himself by the fall and by biting his tongue. Put a stick or cork between his teeth and let him lie quietly undisturbed. Don't try to hold him down or make him sit up. He will come to no harm on the floor and you cannot stop the fit. Ammonia on a handkerchief held under the nose to smell will assist reviving consciousness. Put him in the hospital at once.

***Fracture.** See, "Broken Bones."

***Freezing.** If a man is overcome by the cold, do not take him into a warm room, or heated tent. Put him into a cool room without draughts and get a doctor at once. Meanwhile loosen his clothing and rub arms and legs towards the heart with cold water and a towel or sponge, using pressure.

When he revives give him hot drinks and wrap him up well in hot blankets and put him in the hospital.

When freezing to death a man feels overcome with sleepiness and stupor. Take a switch or stick and beat

him unmercifully. Remember that falling to sleep means death.

***Frost-bite.** The best way to get frost-bitten is to have on damp clothing, such as wet shoes and socks or mittens. The first feeling of frost bite is numbness, and the first sign is marble whiteness.

Treatment. Rub the frozen part briskly with snow or ice cold water, if the frost-bite has just occurred. If it has been frozen more than fifteen minutes, *rub very gently* with snow, cold water or coal oil (kerosene). If you rub hard, it will break the frozen flesh.

Returning pinkness is a sign of thawing; if the parts turn a dark color, see a surgeon at once, for it means gangrene (death of the flesh).

When thawed out apply plenty of oil, tallow or vaseline.

If gangrene has set in and no doctor is available, then treat as a burn.

By all means keep away from heat. To toast frost-bitten fingers or toes before a fire is liable to result in chilblains.

Headache. Among troops headache is usually due to intestinal indigestion, combined with a congestion of the stomach. Take a tablespoonful of Worcestershire sauce or 5 drops of tobasco sauce in a tumbler of hot water as a drink and put a small piece of soap up into the bowel to cause a movement.

Head, how to keep cool. By placing wet, green leaves inside of hat.

Heat exhaustion. The man falls out in a faint while marching, or on fatigue or parade. He looks pale, his body is clammy and cold, his breathing is sighing and

heart fluttering. *What is the matter?* His heart is weak from poisons in the blood, usually alcohol, but often too much carbonic gas and too little oxygen. This occurs when men are soft-muscled: so, young soldiers, recruits and fat soldiers and especially those who drink alcohol, use drugs or smoke or chew tobacco while hiking, are the first to have it.

Treatment. Loosen the man's clothing, remove his pack, lay him on his back in the shade, with head and shoulders lower than his hips and raise his feet in the air. This will make the blood flow to the heart and brain. If he has fainted, slap the bare chest with the hand or a wet towel and briskly rub the arms towards the heart. If he does not revive, apply hot bottles, or bricks to the chest and abdomen, and ammonia to the nose, as a smelling salt. Do not give stimulants until he is conscious. He should ride in the ambulance, or go to the hospital.

Heart burn or
indigestion. } A tablespoonful of Worcestershire
Hiccoughs. }

sauce, or 5 drops of tobasco sauce in a tumbler of water.

Itch. When due to insects or vermin, use soap, hot water, and kerosene oil as a wash.

Ivy poison can be relieved with a cloth soaked with baking soda and water or with lime water.

Lightning. A man struck by lightning is treated the same as in the case of drowning, omitting, of course, the operation of getting the water out of the lungs.

Lumbago. Same as treatment for bruises.

Needle. When a needle gets lost in the flesh, push it on through. Put tincture of iodine on the wound.

Nose, foreign body in. If it cannot be sneezed out, lean the head back and pour a little oil into the nostril. Then sniff and blow the nose alternately. If this is not successful, take a lead pencil and try to push the object straight back into the throat. This must be done very gently.

Piles. Put a little piece of ice in the lower bowel and hold it against the piles. See a doctor.

***Poison.** When poison has been swallowed, cause the patient to take a large quantity of luke-warm water and make him vomit by putting his finger in his throat. Repeat this and then have him swallow the white of two eggs or some milk into which raw flour or corn-starch has been stirred.

If you know he took bichloride of mercury, you may increase the amount of eggs and give one-half glass of weak lime water.

If you know he took carbolic acid, give him alcohol (pure alcohol or in the form of gin or whiskey) and plenty of it in order to neutralize the acid.

Get a doctor as soon as possible, and save the vomit and poison not taken, for him to see.

Poultices. Poultices may be used instead of hot towels for bruises, felons, boils, carbuncles, muscular rheumatism, lumbago, stiff neck, etc. They are easily made of cornmeal or oatmeal. Mix by adding a little at a time to boiling water and stirring to a thick paste; then spread on cloth. Renew from time to time as it cools.

To prevent a poultice from sticking, cover the under surface with clean mosquito netting or smear the skin with oil.

Rheumatism. Same as for bruises.

Scalds. Apply at once common baking soda or olive oil and cover with a bandage. To sprinkle with flour is also good.

Scratches of cats and other animals. Apply tincture of iodine or wash with soap and water.

***Shock.** In case of collapse following an accident, treat the accident; then treat as for fainting. Apply hot plates, stones or bottles of hot water, or an electric light wrapped in towels over the stomach. Wrap up warmly. Keep the patient quiet, in the dark, and send for a doctor.

Snow or sun blindness. Smear the nose and face about the eyes with charcoal, and wear a cloth over the face with small holes for the eyes.

Sore throat. Gargling with hot strong tea or hot water and salt is often effective.

Listerine diluted in water and used as a gargle is also good.

Peroxide of hydrogen is a good gargle.

Spider bite. Apply a cloth dampened with alcohol or weak ammonia and water.

Suffocation by gas. See "Asphyxiation by gas."

Sprains. The regular medical treatment is to plunge a sprained ankle, wrist or finger, into water as hot as can be borne at the start, and to raise the heat gradually thereafter to the limit of endurance. Continue for half an hour, then put the joint in a hot wet bandage, reheat from time to time, and support the limb in an elevated position,—the leg on a chair or stool; the arm, carried in a sling. In a day or two begin gently moving

and kneading the joint, and rub with liniment, oil or vaseline.

As a soothing application for sprains, bruises, etc., the virtues of witch hazel are well known.

Stiff neck and stiff muscles. Same treatment as bruises.

Stings. Stings of bees, jelly fish and other stinging animals are treated with a very weak solution of ammonia in water applied as a lotion. Or apply a very weak solution of carbolic acid in water, a strong solution of baking powder, a slice of crushed raw onion, a moist quid of tobacco, witch hazel, listerine, or a paste of clay.

Before applying any of these remedies, extract the sting, if left in the wound. Also, work out as much of the poison as possible by massaging and sucking the wound.

Sun-burn. Treat with witch hazel or listerine or vinegar well diluted with water.

***Sunstroke.** In sunstroke the man has a blazing red face, dry, burning hot skin; agitated heart; snoring breathing; a high fever, and is unconscious and delirious. *What is the matter?* The part of the brain which regulates the heat of the body is overcome by the heat and loses control,—the man is entirely too hot all the way through.

Treatment. First of all remove the pack and shoes and loosen the clothing. Then souse the man, clothing and all, with water. Lay him in the shade and fan him, keeping him covered and wet. This will cool him off without chilling too much. If possible, rub the chest and legs, but not the belly, with ice.

Ticks. Do not pull them off when biting as it will leave the head in the flesh. Apply kerosene oil on a pad. It will make them drop out.

Thirst. Allow the sufferer only a spoonful of water at a time, but at frequent intervals. Bathe him if possible.

To quench thirst in the field. Don't drink too often. It is better to rinse out the mouth often, taking a swallow or two only. A pebble or button kept in the mouth will help quench that dry and parched tongue.

Toothache. Hold warm vinegar and salt in mouth around the tooth until the pain ceases, or plug the cavity with cotton, mixed with pepper and ginger.

***Wounds.** Wounds may be made in every degree of size, from the jab of a splinter to the loss of a part of the body from shrapnel.

No matter what form of the wound or the cause, we know the following fact to be of the utmost importance: A wound without germs in it will heal rapidly without pain, redness, heat, or pus and the patient will have no fever. He will eat his regular meals and act as though well.

Such wounds we see made by surgeons when operating. On the other hand, wounds infected with germs are painful, hot, angry, red, and swollen and form large quantities of pus or matter.

What is pus? Pus is a mixture of germs, blood and the flesh that they have destroyed. This pus prevents wounds from healing and often burrows under the skin, forming abscesses which cause fever and chills, and the pus enters the blood causing delirium and death.

Our one aim in treating wounds is to keep out germs.

How do we do it?

With the first aid packet.

The first aid packet consists of two gauze compresses sewed to two cotton bandages. They are sealed in wax paper. There are also two safety pins wrapped in wax paper. These articles are placed in an air-tight metal case which protects them from contamination.

Now, the one important fact about this first aid packet is that the bandage com-

presses and safety pins have been *sterilized*,—that is, they

contain no living germs of any kind. It is, therefore, perfectly safe to put on a wound, *provided the pad touches the wound before it touches anything else and provided that the wound has not been handled*. Therefore, do not wash a fresh clean wound.

CAUTION. Have the wound ready before you open the packet. Do not touch the gauze pad with **ANYTHING**. Do not breathe on it, and be especially careful not to cough or sneeze over it. These things put germs on it which will grow in the wound.

By observing these instructions you may save a man's life. By not observing them, you may cause his death, or cause him much pain and suffering.

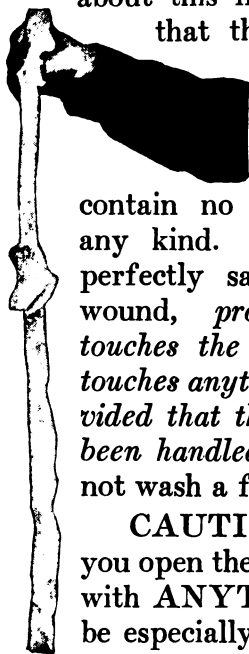


FIG. 19
First Aid
Packet

Shake out packet with right hand so that the pad (or compress) does not touch anything until placed on the wound.



FIG. 18

First Aid Packet

After the removal of packet from tin can, open the wax paper and hold the package as shown.

1. Left hand holds the wax paper.
2. Right hand holds the bandage.

The life of a wounded man is often in the hands of the first one who attends him.

It is said that since the adoption of the first aid packet by armies, it has done more than everything else to save the lives of those wounded in battle by preventing the infection of wounds.

In an emergency a pad from any kind of cloth may be boiled for ten minutes to kill the germs, the water drained off to allow it to cool, and then placed on the wound. Or, the pad may be held over a clear fire until it is fairly scorched; then let it cool. A little charring of the surface will do no harm. Any kind of bandage may then be used to hold it in place.

When a bullet strikes a man first, the wound is clean cut and germ free and it will heal rapidly. If, however, it strikes something first, and bounces off (ricochets) and then strikes a man, it will be knocked into an irregular shape and, therefore, cause a ragged wound with much bruising. What is more important, such a bullet will carry germs into the wound from the object struck, and almost surely some shreds of clothing.

When a wound is infected it is extremely difficult to kill the germs (disinfect). Such a wound, before applying the first aid dressing should be painted with a tincture of iodine, or alcohol or be well washed with boiled salt water.

The following illustrations show various applications of the first aid packet:—

Bandage to wounds of head



1. Place pad on wound.
2. Encircle greatest thickness of the head by the bandages.
3. When the bandages pass above the ear turn and go in the right angle direction. Put on as if tying up 5 lbs. sack of sugar.

Bandaging palm or hand



1. Put pad of the first aid packet on the wound.
2. Place a large ball of grass or other substance over pad, which is grasped by the hand.
3. Bind bandage tightly over the fist.

Bandage to wounds of breast

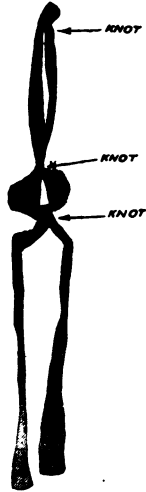
Bandage to wound of (right) arm-pit



The pad of the bandage is placed on the wound of the breast and the ends form a figure 8 of both shoulders and tie in front. A shirt pulled over and pinned to the pad will fix it.

Apply as shown.

A suspensory bandage made from the two bandages of the first aid packet, or any other two bandages.



*Making the knots
(Note well where the
knots are made)*



*1st step
in applying the bandage*



*2nd step
Pass the loose ends be-
tween the legs and then
through the loops on
each side*



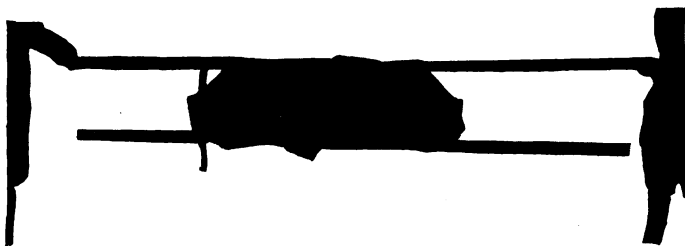
*3rd step
Catch hold of the loose
ends and after the pad is
adjusted to the injured
spot, tie them in front
like a belt*

FIG. 21

The illustrations below show improvised litters.



Litter made of one-half shelter tent, three shelter tent pins and one tent or other pole



Litter made of two poles, two coats and one belt. The coats are buttoned and the sleeves turned inside out, the poles being run through the sleeves. The belt is used as a head rest



The coat litter in use

FIG. 22

CHAPTER X

FIELD EXPEDIENTS—INDIVIDUAL
COOKINGCamp Pot, Hook
and Poker.

The Camp Fire Crane.



Camp Broom.

In the field less attention is paid to the appearance of dress, niceties of military courtesy, etc., than in garrison. Field service offers a better opportunity for *individuality*, and every man should be a "natural born hustler," bearing in mind the injunction, "The Lord helps those who help themselves."



A Good Camp Lamp can be made by using clear tallow fat, (fat of animals), melted down and put in an old tin can. Improve a wick from unravelled cotton or tent canvas, put one end in can and the other end on edge of can and wire.



A Good Camp Candlestick. A safe one can be improvised from a potato with a hole in it—bottom sliced off so it will stand firmly—or an old can partly filled with dirt.



A Good Dinner Plate or Cooking Utensil, from a piece of green thick barked tree, using smooth part for food.

Any Old Tin Can. Top carefully burnt out over camp fire, then scoured makes a good cup or small cooking utensil. Make handle of wire as shown in illustration.



A Reliable Camp Clock. A very accurate one can be improvised by making a sun dial of a piece of stick stuck in the earth where the sun's rays can cast the shadow of the stick on the ground. You can mark the ground most accurately if one of your party has a watch. Then the clock will serve you well, when the man with the watch is gone.

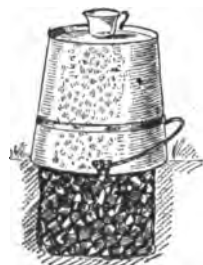
Don't Spoil a Good Knife. In opening tin cans in camp, take the camp axe. Cut a cross in the center and open the cuts afterward, but not with the fingers.

To Heat a Tent Without a Stove. Build a camp fire near tent opening, surround it partly with a radiator of logs, bark of tree or brush, so as to throw the heat inside.

Another Way. Throw into camp fire a lot of stones, the larger the better, let them get red hot, put into bucket and carry into tent, invert the bucket over them, and it will surprise you. With a



change of stones in the fire you can renew and keep warm all night long,—or use camp kettle.



Still Another Way. (Perfectly safe if common sense is used.) Dig a pit half a bucket in size somewhere in the tent. Fill it heaping full of red hot clear coals (embers) from the camp fire,

taking care no unburnt or smoky wood is therein. Now cover this with the kettle or pail. With mud, plaster up the edges, and it will keep your tent and you warm all night long. Use camp pails (iron of course).

And Still Another Way. Dig a trench from interior of tent to a fire in a hole outside of tent, covering the trench with old pieces of tin, sod, etc. To heat all the space in the tent, dig a trench all the way through the tent, having the fire at one end of trench and the chimney at the other, both fire and chimney being, of course, outside. The hot air passing through the trench-flue will keep the tent warm.

In Case of Fire in Tent. If serious, lay hold of the bottom of the bedding and put out, and with a blanket smother the fire quickly. If the fire is caught in time you can smother it.

Let the tent go, but save the outfit therein, if possible. You can improvise shelter but not the outfit, so save that part first.

To Find Out Correctly How the Winds Blow. If the wind is very light, place your finger in your mouth for a minute, moisten it, then hold in the air. The coolest side indicates the direction from which the wind blows.



A Good Fire Shovel.—Can be made of a piece of tin and a split stick; it is also an excellent broiler.

How to Sleep Warm. Sheets of paper, or an old newspaper sewed between two blankets, equals three blankets. A thin vest lined with paper equals two.

In cold weather, it is most important both for comfort and health that the extremities be kept warm at night. A sweater with high rolling collar, a pair of

heavy woolen socks and a woolen knitted nightcap are excellent for this purpose, being equivalent to two or three blankets.

Chafing. If the seams of underwear chafe or gall the skin, turn inside out. Common corn starch is a most excellent talcum or chafing preventative and cure.

If Soaking Wet. If soaking wet and no dry clothes handy take off wet garments and wring them out as dry as possible—put on again,—you are less liable to take cold, and will be much warmer besides.

To Test the Freshness of Meats, Game, etc. Thrust a knife blade into center of flesh—remove the blade; your nose to the knife blade will do the rest. Meat is often fresh outside when the inside is not. Your nose can't tell inside—the knife blade can.

For Washing Flannels and Woolens. Don't wring out, hang them up dripping wet and they won't wrinkle up or shrink.

To Keep Fresh Meats, Game, etc. By hanging in old sack, sack opening downward; secure with cord, tied to legs of game; then take a few branches of leaves and cover; the rustle of these leaves will help keep the flies away and the meat cool. Fasten the bottom opening with splinters of wood, so you can get at the meat without trouble.

To Cool Water. Any old well soaked cloths, wrapped around outside of bottle or bucket will, if hung in the shade, help cool contents. Remove the cork.

Water may also be cooled by wetting the canteen and then hanging in a cool place.

Hot Water Bottle. A canteen filled with boiling water is a foot warmer (a hot water bottle for your camp



Camp
Fire
Tonga.

bed), that insures you the warmth of an extra blanket, and is invaluable in emergencies of camp sickness.

Life Preservers. Three or four empty canteens, tightly corked and fastened together, make a very good life preserver.

A Good Camp Bed for Tents, or Tent Carpet. Take fine ends of any branch clippings, and plenty of them. Commence at the head of tent, lay rows of them butts to the rear, in successive layers. If this is done right and carefully and ends locked with a log rolled on so as to hold end in place, an extremely soft bed is the result. Over this spread a piece of canvas or blanket.

If Thirsty and Can't Find Water. Place a pebble or button in the mouth and keep it there; it will surprise you with the result, and relieve that dryness entirely—try it.

Lost in Camp. When you find you have lost your way, don't lose your head—keep cool; try and not let your brains get into your feet. By this, we mean, don't run around and make things worse, and play yourself out. First: Sit down and think; cool off, then climb a tree, or hill, and endeavor to locate some familiar object you passed, so as to retrace your steps. If it gets dark, build a rousing camp fire. Ten to one you will be missed from camp, and your comrades will soon be searching for you, and your fire will be seen by them. Give distress signals, but don't waste all your ammunition thus. It's ten to one morning and a clear head, after a comfortable night, (if you make it so) will reveal to you the fact that your camp is much closer to you than you imagined.

To locate position—note the limbs and bark of trees—the north side of trees can be noted by the thickness and general roughness. Moss most generally is to be found near the roots on the north side. Note also, limbs or longer branches, which generally are to be found longer on south side of trees, while the branches exposed to the north most generally are knotty, twisted and drooped. In the forest the tops of the pine trees dip or trend to the north; also: If you find water, follow it; it generally leads somewhere—where civilization exists. The tendency of people lost, is to travel in a circle uselessly; by all means, keep cool, and deliberate. Blaze your way, by leaving marks on trees to indicate the direction you have taken.

To Make a Fire Without Matches. Take a dry handkerchief or cotton lining of your coat, scrape out a very fine lint, a few handfuls, by using the crystal of your watch, compass or spectacle, a sun glass can be made that will ignite the lint, which can be blown to fire.

Another Way. Sprinkle powder of cartridge as a fuse to the cotton lint, and with the cartridge percussion cap you can easily ignite the lint, dry moss, leaves, etc.

Still Another Way. Take scrapings of very fine pine wood, find a piece of quartz or hard ragged rock, by using your knife or bayonet as a steel you have a practical flint and steel. If you haven't these things, use two pieces of rough, jagged stone and by striking them together sharply in slanting blows you can ignite the lint or scrapings.

To Make a Good Camp Lantern. From an ordinary clear glass bottle, if the bottle is long necked. Heat a piece of wire red hot, and wrap it around the

part below the neck, the wide part, submerge the neck into a bucket of water and it will cut the part surrounded by the hot wire as smooth and clean as if cut to order. Now wire a handle to carry it by, with a loop over the bottom, fill $\frac{1}{4}$ full with moist dirt or sand, forming a hole therein with a round stick, insert your piece of candle in this hole, cover with a piece of old tin can top (perforated with holes) and you have a good outside camp lantern.

To Keep Matches Dry. Cork a few in a small bottle.



To Correctly Ascertain the Points of the Compass. Face the sun in the morning; spread out your arms straight from the body—before you is east, behind you the west, to your right hand, the south, left, north, (accurately). If the sun don't shine, note the tops of pine trees, they invariably dip to the north. (See also lost in camp.)

Bathing. Be careful about bathing in strange places. Don't dive; weeds or sharp rocks may be at bottom. Water that looks inviting often is full of treacherous, slimy weeds in which once caught it is almost impossible to get free. Look out for deep unseen mud holes. Better splash water over the body than to take big risks.

Drying Clothes in Cloudy Weather. Build a dome-shaped work by bending twigs into a half circle, with ends in ground, over a *smoldering* fire, and place the clothes on the bent twigs.

Fording Streams. In case of a quick-sand bottom, send in a few men on foot to find a solid place. Stakes

are then driven to mark the way, and the command crosses the stream. Wagons should not stop while crossing a stream, for in case of soft bottoms, they will likely get bogged.

Mules should always be watered before starting to cross a stream—otherwise they will very likely stop to drink, and the wagon may get stuck.

It is well to remember that the shallowest water is generally found from one salient—that is, one projecting point—of the bank to another, diagonally across. The bends and hollows or re-entrants usually have the deepest water.

To Cross an Unfordable Stream. If narrow, try to construct a bridge of some kind, or make a temporary crossing by felling trees opposite to each other on opposite sides.

Wagon bodies covered with canvas or wagon sheets, lashed at the ends and fastened, make good boats.

INDIVIDUAL COOKING

The following remarks on individual cooking, prepared by Captain Holbrook and published by the Fort Riley Training School for Bakers and Cooks, are of so valuable a nature that, with the permission of the author, they are here reproduced:

For such individual cooking as may be necessary for the soldier when thrown upon his own resources, the following Bills of Fare have been prepared. Where the tin cup and spoon are mentioned, reference is made to those issued with the field mess kit.

Remember that the best fire for cooking is a small, clear one, or better yet, a few brisk coals.

Almost anything that can be cooked at all can be prepared in the mess kit, though the variety is necessarily small and quantities limited on account of few utensils of small capacity.

TABLE OF WEIGHTS AND MEASURES

The old model Ordnance tin cup holds about $\frac{7}{8}$ of a quart, and the new model (1910) cup holds $\frac{7}{8}$ as much as the old model. The cup is very convenient for determining the weights of the ration in the field. The old and the new model cups will hold—

<i>Article</i>	<i>Old Model</i>	<i>New Model</i>
Flour	1 pound	$\frac{7}{8}$ pound
Beans	$1\frac{1}{2}$ "	$1\frac{1}{4}$ "
Rice	$1\frac{1}{2}$ "	$1\frac{1}{4}$ "
Peas	$1\frac{1}{2}$ "	$1\frac{1}{4}$ "
Hominy	$1\frac{1}{4}$ "	$1\frac{1}{8}$ "
Corn Meal	$1\frac{1}{4}$ "	$1\frac{1}{8}$ "
Salt, issue	2 "	$1\frac{3}{4}$ "
Sugar, granulated	$1\frac{1}{2}$ "	$1\frac{1}{4}$ "
Coffee, rstd. and grnd. . .	10 ounces	$8\frac{3}{4}$ ounces
Tea, English breakfast .	6 "	$5\frac{1}{4}$ "
Tea, Young, Hyson	10 "	$8\frac{3}{4}$ "
Tea, Oolong	7 "	$6\frac{1}{8}$ "

Company Commanders in estimating the amounts that will be required for each meal may assume that one man will consume for one meal about

1 ounce of sugar.

$\frac{1}{2}$ ounce of coffee, 1 ounce chocolate or cocoa
or 1-10 ounce of tea.

4 ounces of dried vegetables.

4 ounces of flour or 4 hardtacks.

8 ounces of fresh vegetables.

4 ounces of sliced bacon or 6 to 8 ounces of fresh meat.

1-5 ounce of salt.

1-50 ounce of pepper.

SUGGESTIONS FOR HANDLING BILL OF FARE No. 1

1. Take two-thirds of a cup of water and bring to a boil. Add four spoonfuls of rice and boil until soft, i. e., until it can be mashed by the fingers with but little resistance. This will require about 15 minutes. Add two pinches of salt, and after stirring, pour off the water and empty the rice out on the lid of the mess pan.

2. Meanwhile, fry three slices of bacon until slightly browned in the mess pan over a brisk fire or hot coals, and lay them on top of the rice, leaving sufficient grease in the pan in which to fry the flap jack.

3. Take six spoonfuls of flour and one-third spoonful of baking powder and mix thoroughly. Add sufficient cold water to make a batter that will drip freely from the spoon. Add a pinch of salt and two pinches of sugar and pour the batter into the mess pan, which should contain the grease from the fried bacon. Place over medium hot coals and bake from five to seven minutes; see that it will slip easily in the pan and then, by a quick toss, turn it over and continue the baking from five to seven minutes longer or until, by examination, it is found to be done.

4. While the batter is frying, wash out the tin cup; fill two-thirds with water and let come to a boil. Add one medium heaping spoonful of coffee and stir well and, if desired, one spoonful of sugar and let boil for about five minutes. Let simmer for about ten minutes

BILLS OF FARE

1. Bacon	Flap Jack	Coffee
2. Meat and Vegetable Stew	Flap Jack	Coffee
3. Broiled Steak	Hard Bread	Cocoa
	and Onions	
4. Bacon	Stewed Tomatoes	Hoe Cake
5. Bacon	Oatmeal	Hard Bread
6. Bacon	Baked Potatoes	Flap Jack
	Rice	
7. Fried Steak	Boiled Potatoes	Hard Bread
	Cold Tomatoes	Coffee
Etc.	Etc.	Etc.

OR

WHEN TIME IS MORE LIMITED

8. Fried Bacon	Fried Potatoes	Hard Bread	Coffee
9. Fried Bacon	Flap Jack		Coffee
10. Corned Beef (cold)	Tomato Stew	Hard Bread	Coffee
11. Fried Fish and Bacon	Baked Potatoes	Hard Bread	Coffee
12. Meat and Vegetable Stew	Hoe Cake		Tea
13. Broiled Steak	Baked Potatoes	Hard Bread	Cocoa
14. Boiled Fish.	Fried Potatoes	Hard Bread	Tea
Etc.	Etc.	Etc.	Etc.

longer. Settle by a dash of cold water or let stand a few minutes.

A hot meal is now ready to serve. Time about 40 minutes.

MEATS

Bacon. Cut side of bacon in half lengthwise. Then cut slices about five to the inch, three of which should generally be sufficient for one man for one meal. Place in a mess pan with about one-half inch of cold water. Let come to a boil and then pour the water off. Fry over a brisk fire, turning the bacon once and quickly browning it. Remove the bacon to lid of mess pan, leaving the grease for frying potatoes, onions, rice, flap jacks, etc., according to recipe.

Fresh Meat.—To fry. To fry, a small amount of grease (1 to 2 spoonfuls) is necessary. Put grease in mess pan and let come to a smoking temperature, then drop in the steak and, if about one-half inch thick, let fry for about one minute before turning—depending upon whether it is desired it shall be rare, medium or well done. Then turn and fry briskly as before. Salt and pepper to taste.

Applies to beef, veal, pork, mutton, venison, etc.

Fresh Meat.—To broil. Cut in slices about one inch thick, from half as large as the hand to four times that size. Sharpen a stick or branch of convenient length—say from two to four feet long—and weave the point of the stick through the steak several times so that it may be readily turned over a few brisk coals or on the windward side of a small fire. Allow to brown nicely, turning frequently. Salt and pepper to taste. Meat with considerable fat is preferred, though any meat may be broiled in this manner.

RECIPES

Drinks

(For one meal for one man)

ARTICLE AND AMOUNT	AMOUNT OF WATER	ADD WHEN	LET •BOIL	ADD IF DESIRED	REMARKS
COFFEE 1 hpg. spn.	3 cup	Water boils	5 min.	1 spn. sug.	Stir grains well when adding. Let simmer 10 minutes after boiling. Settle with a dash of water or let stand a few minutes. Ready to serve.
COCOA 1 hpg. spn.	"	"	"	1½	Stir when adding until dissolved. Ready to serve when sufficiently cooled.
CHOCOLATE 1 cu. in.	"	"	"	"	Stir when adding until dissolved. Ready to serve when sufficiently cooled.
TEA ½ lev. sp.	"	"	"	1	Let stand or "draw" five minutes. If allowed to stand longer, the tea will get bitter unless separated from the grains.

NOTE: COFFEE made by above recipe is of medium strength and the same as when using four ounces to the gallon of water. It is within the limit of the ration if made but twice each day.

TEA. A little more than medium strength, the same as when using 3 ounce to the gallon, and within the ration allowance if made three times per day.

CHOCOLATE and COCOA. About one ounce per man per meal. If available, milk should be used in the place of water, and should be kept somewhat below the boiling point. Mix a one pound can of evaporated milk with 3½ quarts of water to make one gallon of milk of the proper consistency for use in making cocoa or chocolate.

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DRIED VEGETABLES

(For one meal for one man.)

ARTICLE AND AMOUNT	AMOUNT OF WATER	ADD WHEN	LET BOIL	SEASON WITH	ADD IF DESIRED	REMARKS
RICE 4 hpg. spna.	3 cup	Water boils	20 mins.	2 pnchs. salt	1 hpg. spn. sug.	Should be boiled until grains (while still nicely separated) may be crushed between the fingers with but little resistance. Then drain off the water.
CORNMEAL, HOMINY, FINE OATMEAL 4 hpg. spna.	1 "	"	"	"	"	{ All water should now be taken up by the Cornmeal, Hominy or Oatmeal which forms a thick paste.
DRIED SW. CORN 4 hpg. spna.	1 "	"	"	"	"	
LIMA BEANS 4 hpg. spna.	2 "	Water is put on	2 or 3 hrs.	1 "	"	
CHILI BEANS AND FRIJOLES 4 hpg. spna.	3 "	"	3 or 4 hrs.	1 "	"	{ Above remark applies.
BEANS, ISSUE DRIED GR. PEAS HOMINY, COARSE SPLIT PEAS 4 hpg. spna.	3 "	"	"	1 "	"	

NOTE: By a heaping spoonful is meant here all that can readily be taken up.
A pinch of salt is the amount that can readily be taken up between the end of the thumb and forefinger.

Fresh Meat.—To stew. Cut into chunks from one-half inch to one inch cube. Fill cup one-third full of meat and cover with about one inch of water. Let boil or simmer about one hour or until tender. Add such fibrous vegetables as carrots, turnips or cabbage, cut into small chunks, soon after the meat is put on to boil, and potatoes, onions, or other tender vegetables when the meat is about half done. Amount of vegetables to be added, about the same as meat, depending upon supply and taste. Salt and pepper to taste. Applies to all fresh meats and fowls. The proportion of meat and vegetables used varies with their abundance and fixed quantities cannot be adhered to. Fresh fish can be handled as above, except that it is cooked much quicker, and potatoes, onions, and canned corn are the only vegetables generally used with it, thus making a chowder. A slice of bacon would greatly improve the flavor. May be conveniently cooked in mess pan or tin cup.

FRESH VEGETABLES

Potatoes, Fried. Take two medium sized potatoes or one large one (about one-half pound), peel and cut into slices about one-fourth inch thick and scatter well in the mess pan in which the grease remains after frying bacon. Add sufficient water to half cover the potatoes, cover with the lid to keep the moisture in, and let come to a boil from 15 to 20 minutes. Remove the cover and dry as desired. Salt and pepper to taste. During the cooking the bacon already prepared may be kept on the cover, which is most conveniently placed bottom side up over the cooking vegetables.

Onions, Fried. Same as potatoes.

Potatoes, Boiled. Peel two medium sized potatoes or one large one (about one-half pound), and cut in coarse chunks of about the same size—say one and one-half inch cubes. Place in mess pan and three-fourths fill with water. Cover with lid and let boil or simmer for 15 or 20 minutes. They are done when easily penetrated with a sharp stick. Pour off the water and let dry out for one or two minutes over hot ashes or light coals.

Potatoes, Baked. Take two medium sized potatoes or one large one cut in half (about one-half pound). Lay in a bed of light coals, cover with same and smother with ashes. Do not disturb for 30 or 40 minutes, when they should be done.

Canned Tomatoes. One two-pound can is general-ly sufficient for five men.

Stew. Pour into the mess pan one man's allowance of tomatoes, add about two large hardtacks broken into small pieces and let come to a boil. Add salt and pepper to taste, or add a pinch of salt and one-fourth spoonful of sugar.

Or, having fried the bacon, pour the tomatoes into the mess pan, the grease remaining, and add if desired, two broken hardtacks. Set over a brisk fire and let come to a boil.

Or, heat the tomatoes just as they come from the can, adding two pinches of salt and one-half spoonful of sugar if desired.

Or, especially in hot weather, eaten cold with hard bread they are very palatable.

HOT BREADS

Flap Jack. Take six spoonfuls of flour and one-third spoonful of baking powder and mix thoroughly (or dry mix in a large pan before issue, at the rate of 25 pounds of flour and three half pound cans of baking powder for 100 men). Add sufficient cold water to make a batter that will drip freely from the spoon, adding a pinch of salt. Pour into the mess pan, which should contain the grease from fried bacon, or a spoonful of butter or fat, and place over medium hot coals, sufficient to bake so that in from five to seven minutes, the flap jack may be turned by a quick toss of the pan. Fry from five to seven minutes longer or until, by examination, it is found to be done.

Hoe Cake. Hoe cake is made exactly the same as flap jack by substituting *corn meal* for *flour*.

Emergency Rations. Detailed instructions as to the manner of preparing the emergency ration are found on the label with each can. Remember that even a very limited amount of bacon or hard bread, or both, taken with the emergency ration makes it far more palatable, and greatly extends the period during which it can be consumed with relish. For this reason it would be better to husband the supply of hard bread and bacon to use with the emergency ration when it becomes evident that the latter must be consumed, rather than to retain the emergency ration to the last extremity to be used exclusively for a longer period than two or three days.

CHAPTER XI

THE RIFLE

DESCRIPTION; WHAT IT WILL DO; OPERATION OF VARIOUS PARTS; DISMOUNTING AND ASSEMBLING

Description

Know your rifle. The rifle is the soldier's fighting weapon, given to him by the Government with which to defend his country and himself.

It is the soldier's best friend.

He should know it and understand it. He should learn its peculiarities, if it has any,—that is, if it shoots high or low; to the left or to the right. And just as one makes allowance for the peculiarities of a friend, so should the soldier, in firing, make allowance for the peculiarities of his rifle,—*his best friend*.

First step in getting acquainted with your rifle. The first step in getting acquainted with your rifle is to learn its correct name, its weight, the size of the bore, its range (that is, how far it will shoot), the kind of ammunition it shoots, its penetration (that is, how far the bullet will go into different materials at different ranges), the names of its various parts, what the rifle will do, etc.

Name. It is officially known as the U. S. MAGAZINE RIFLE, MODEL OF 1903, CALIBER .30.

It was made originally at the Springfield Armory, and is, therefore, also known as the U. S. SPRINGFIELD RIFLE.

It is now made at Springfield Armory, Mass., and Rock Island Arsenal, Ill.

It is the best rifle in the world.

Weight. It weighs, without bayonet, 8.69 pounds (*about* eight and three quarters pounds). The bayonet weighs 1 pound.

Caliber. The caliber is .30,—that is, the diameter (the width) of the *bore*, measured between the lands, is 30 one-hundredths of an inch.

The Cartridge. The cartridge consists of:

1. *A case (brass shell)* containing from 47 to 50 grains (a little more than one-tenth of an ounce) of smokeless powder.



FIG. 1

2. *A primer*,—that is, a *cap* containing percussion powder, which, when struck by the firing pin explodes and ignites the powder in the shell.

3. *A steel jacketed, nose-pointed bullet.* The core of the bullet is of lead and tin composition. The bullet weighs 150 grains (*about* one-third of an ounce.)

The cartridge complete weighs 392 grains (*little less than an ounce.*)

(NOTE. A company officer should take a cartridge apart and explain the functions of the different parts.)

Clip and bandoleer. The cartridges are packed 5 in a clip; 12 clips are packed in a bandoleer (see page 18) made of khaki cloth having six (6) pockets, each holding two (2) clips. A bandoleer with cartridge weighs about four (4) pounds.

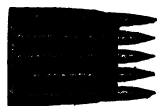


FIG. 2
Clip of
cartridges

The bore. The bore of the rifle is a perfect cylinder, with four spiral or corkscrew grooves cut in it, the grooves making one complete turn in every ten (10) inches.



FIG. 3

The lands. The raised portions left between the *grooves* are called *lands*.

Rifling. This cutting of grooves, called *rifling*, makes the gun a *rifle* instead of a *smooth bore*.

What the rifling does. The rifling grips the bullet as it passes through the bore and gives it a twist which causes it to spin to the right like a top, as it passes through the air. This spinning keeps the bullet from tumbling,—that is, from going end over end,—and consequently when it strikes, the point is always in front. This gives greater accuracy and range,—that is to say, the rifle shoots straighter and farther.

However, this twist to the right also produces the undesirable effect of causing the bullet to go to the right, which is overcome by cutting on a diagonal the inner sides of both branches of the leaf. (See C, Fig. 3a, and similar undercut on opposite branch.)

FIG. 3a

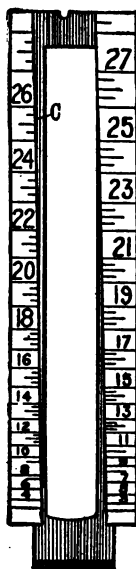
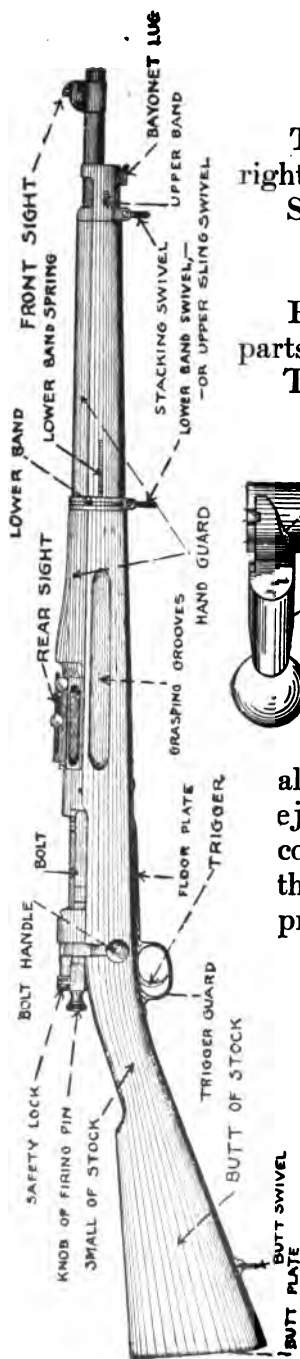


FIG. 4



This movement of the bullet to the right is called the *drift*.

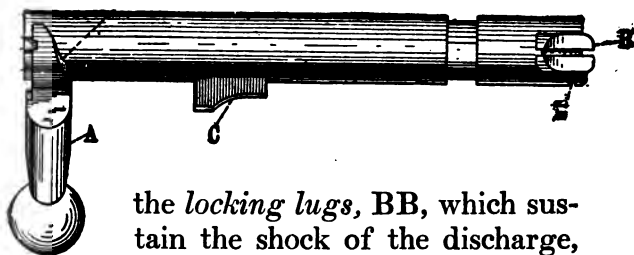
See "The *drift* slide," page 223.

Names of the Parts

Fig. 4 gives the names of the principal parts of the rifle.

The Bolt, Fig. 5, has the *handle*, A;

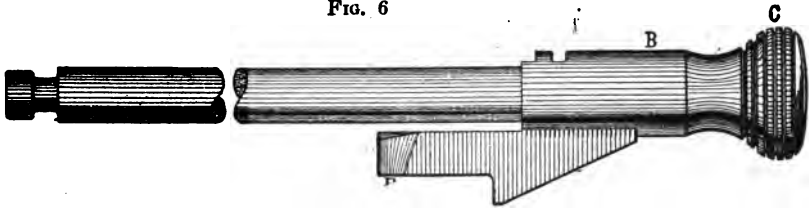
FIG. 5



the *locking lugs*, BB, which sustain the shock of the discharge, the one on top being slotted to allow the passage of the point of the ejector; the *safety lug*, C, which comes into play only in the event of the locking lugs yielding under powder pressure.

The Firing Pin, Fig. 6, consisting of the *firing pin rod*, A, and the *cocking piece*, B, which are made separately, the former being screwed into the latter and riveted in assembling; the length of the rod is so adjusted that when the front end of the cocking piece bears against the interior shoulder of the sleeve the striker point will

FIG. 6



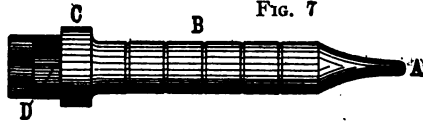
project the proper distance beyond the face of the bolt. C is the *knob*.

The Firing Pin Sleeve, Fig. 7, sectional view, fits over the front end of the firing pin and the rear end of the striker, covering the joint hole, and preventing accidental separation of the firing pin and striker; its rear end forms the front bearing for the mainspring.

FIG. 8



FIG. 7



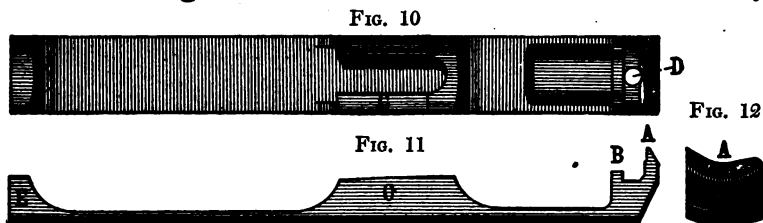
The Striker, Fig. 8, has the *point*, A; the *body*, B; the *shoulder*, C; and the *joint hole*, D, by which it is secured to the firing pin. The annular grooves on the striker retain the lubricating oil and prevent the accumulation of rust thereon.

The Mainspring is shown in Fig. 9.

FIG 9



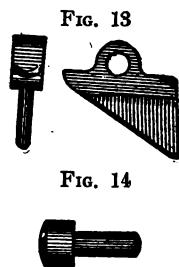
The Extractor, Fig. 10, inside view, Fig. 11, top view, and Fig. 12, front end view, has the *hook*, A, by



which the cartridge case is extracted from the chamber, the *tongue*, B, which rides in its groove at the front end of the bolt; the *lug*, CC, which is undercut to receive the ears on the lugs of the extractor collar; the *gas escape hole*, D; and the *back rest*, E, which is curved to fit the circle of the bolt.

The Ejector, Fig. 13, is hinged on the ejector pin in its recess in the left side of the receiver, ejection being accomplished by the slotted lug on the bolt coming in contact with the heel when the bolt is drawn to the rear.

The head of the Ejector Pin, Fig. 14, is slotted for the purpose of providing sufficient tension to hold the pin in its place during the process of assembling.



The Safety Lock, rear and side views, is shown in

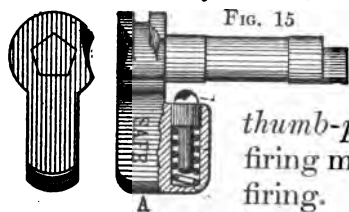


Fig. 15. The words, *Safe*, and *Ready*, impressed on the opposite sides of the *thumb-piece*, A, indicate that the firing mechanism is locked or ready for firing. When locked it is impossible for the piece to be fired, nor can the bolt be drawn back.

The Floor Plate, Fig. 16, inside view, and Fig. 17, sectional view, has the *tenon*, A, which fits into a groove at the front end of the magazine and with the assistance

FIG. 16

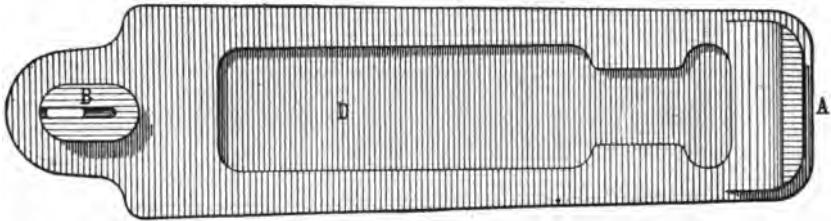
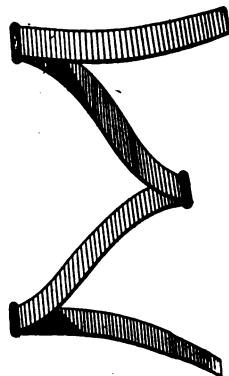


FIG. 17

of the floor plate catch retains the floor plate securely in its place at the bottom of the magazine; the *lug*, B, which is slotted to receive the floor plate catch and has a tenon on its front end which fits into a slot in the magazine; the *cavity*, C, through which the floor plate catch is released by means of the end of a bullet, the *magazine spring recess*, D, and the *magazine spring seat*, E.

FIG. 18



The Magazine Spring is shown in Fig. 18, the smaller end slides into the undercuts on the follower, and the larger end fits in the same way into the undercuts in the floor plate.

The Follower, Fig. 19, top view, and Fig. 20, right side view, has the *rib*, A, which serves to locate the cartridges in the magazine and guides the last cartridge into

FIG. 19

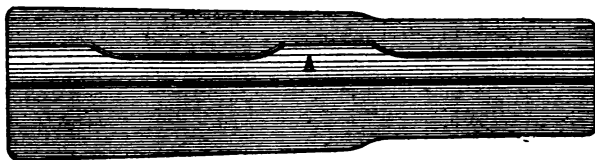


FIG. 20



the chamber; the *front stop* for the magazine spring, B; the *rear stop* for the magazine spring, C, and the *lugs*, D, in which are the undercuts for the magazine spring.

The Cut-off, Fig. 21, side view, and Fig. 22, rear view, has the *thumb piece*, A, the words, *On* and *Off*, on opposite sides of the thumb piece indicate to

FIG. 21



FIG. 22



the firer whether the magazine is *on* or *off*. When the cut-off thumb piece is turned down, indicating *off*, and the bolt is drawn to the rear, the rear end of the slotted locking lug stops against the projecting front end of the cut-off body. The piece is then ready for single loading. When the cut-off thumb piece is turned up, indicating *on*, and the bolt is drawn to the rear, the rear end of the slotted locking lug stops against the

shoulder at the rear end of the magazine fire groove. The piece is then ready for loading from the magazine. When the cut-off thumb piece is in the intermediate position, the *dismounting groove*, D, permits the bolt to be drawn entirely out of the receiver.

Fig. 23 shows the *rear sight leaf* (raised), the *drift slide* (E), and the *wind guage* (F, L). It is most important that the soldier be thoroughly familiar with the use of these parts, for otherwise it is impossible for him to sight correctly and use his rifle properly.

The leaf is graduated from 100 to 2850 yards. The lines that extend the whole way across the two branches of the leaf, mark 100-yard divisions; those that extend about half way across, mark 50-yard divisions, and the shorter lines mark 25-yard divisions.

The *even* numbers (4, 6, 8, etc.) on the *left* branch of the leaf, indicate 400, 600, 800, etc., yards.

The *odd* numbered hundreds of yards (300, 500, 700, etc.) are on the *right* branch of the leaf.

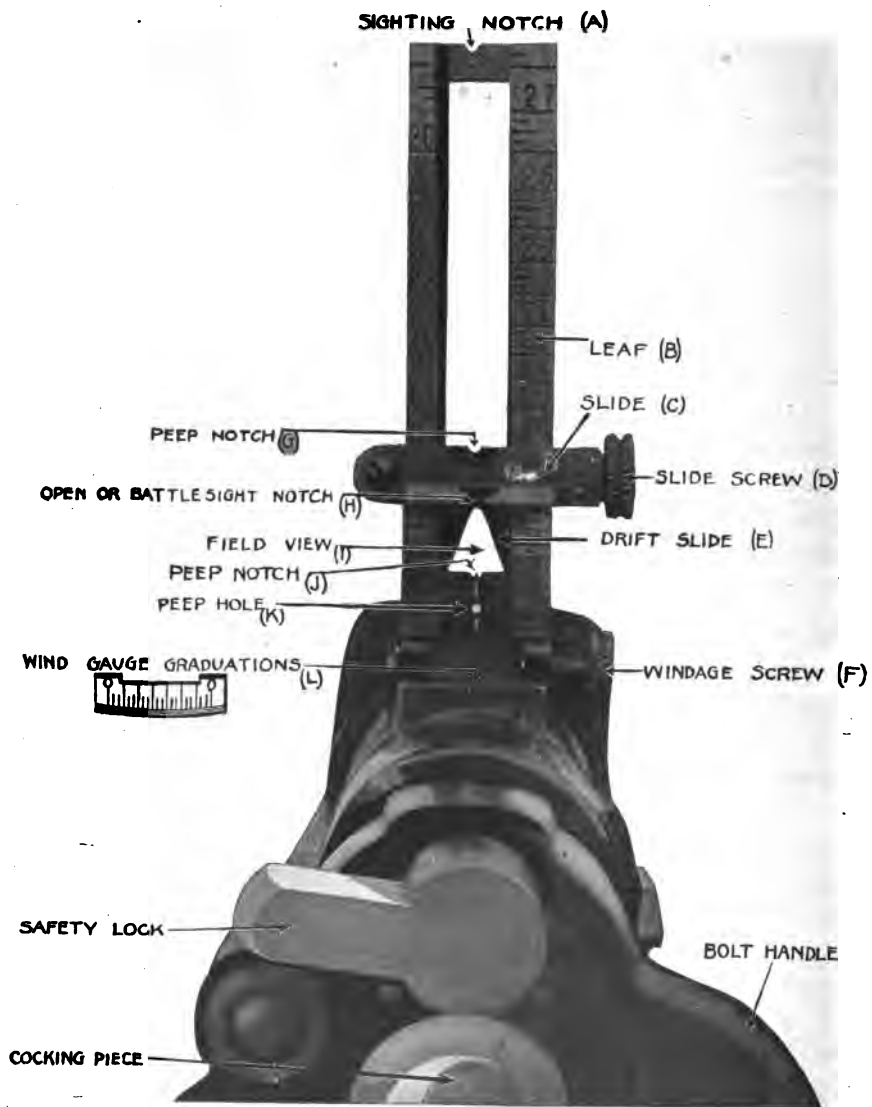
The numbers rest on top of the lines to which they refer.

So, if you want to fire at a target 800 yards away, set the rear sight at 8; 1,000 yards, at 10; 1,200 yards at 12, etc.

With the fly leaf up, ranges from 100 to 2350 yards can be obtained through the *peep hole*, K; from 100 to 2450 through the lower *peep notch*, J; and from 1400 to 2750 yards through the upper *peep notch*, G.

There is a horizontal line on the drift slide, across the *peep hole*, K. If the *peep hole* sight is used the sight is set by this horizontal line, which is set opposite the proper graduation (line across branch of leaf).

FIG. 23



If the *peep notch*, J, is used the sight is set by the short horizontal line,—that is, on a line with the top of the notch.

If the *peep notch*, G, is used, the sight is set by the top of the *slide*, C, which is set on the proper graduation.

Care must be taken not to use one of the *peep notches* when the sight has been set for the *peep hole*, or not to do the reverse, without first changing the sight.

The *sighting notch*, A, used when the range is 2850 yards, is hardly ever used, because the rifle is very, very seldom, if ever, fired at that range.

With the leaf *down*, the *battle sight notch*, H, corresponds to a sight setting of 530 yards when the leaf is raised.

The *drift slide*, E, is fastened to the *slide screw*, D, and as the slide is moved up or down on the leaf, the drift slide moves with it, and at the same time has a lateral movement to the left as it is raised and travels along the undercut between the branches of the leaf, thus automatically correcting for "drift," (the deviation of the bullet to the right due to its twist) by throwing to the left the trajectory of the bullet. This movement corrects for all drift up to 600 yards, but for only part of the drift beyond that range.

By means of the *windage screw*, F, the sight is moved to the right or left, thus making allowance for windage. Each point of *wind guage graduation* gives a deviation of four inches for each 100 yards.

The Front Sight Cover, Fig. 24a, right side view, and Fig. 24b, front view, is made of sheet steel.

FIG. 24a

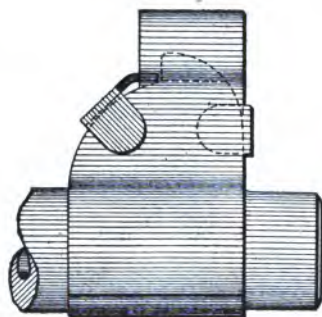
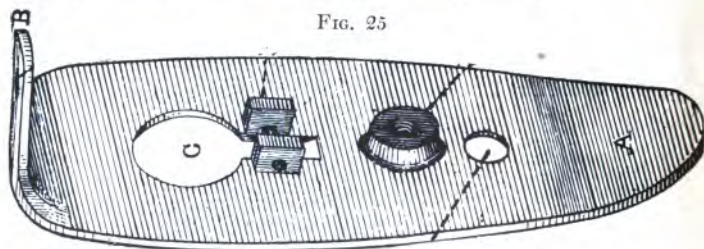


FIG. 24b

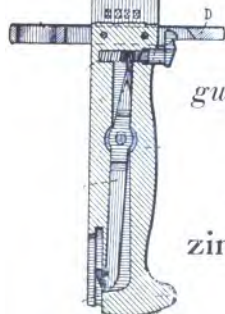


The Butt Plate is represented in Fig. 25. The parts are *toe*, A; *tang*, B; *cap hole*, C.

FIG. 25



The Bayonet, Model of 1905, is shown in Fig. 26. The principal parts are the *blade*, A; the *handle*, B; and the *guard*, D.



What the Rifle Will Do

Use of rifle as single loader and as magazine rifle. The rifle can be used as a single

loader, or as a magazine rifle. When used as a single loader, the cartridges are put into the chamber by hand, one at a time. When used as a magazine rifle, a clip of five cartridges is inserted into the magazine, and the rifle is loaded by working the bolt backward and forward.

Rapidity of fire. Men are trained to fire at the rate of about three shots per minute at effective ranges (600 to 1200 yards) and five or six at close ranges (0 to 600 yards), devoting the minimum of time to loading and the maximum to deliberate aiming. (Par. 147, Infantry Drill Regulations.)

As a single loader, the rifle can be fired from the hip without aim, 27 times in 1 minute, and by using magazine fire, 35 times.

By using the rifle as a single loader, 23 aimed shots have been fired in 1 minute, and, with magazine fire, 25.

Range. Although the rear sight leaf is graduated only to 2850 yards, the maximum range of the rifle (the greatest distance it will shoot) is 5,465 yards (3.1 miles), the time of flight being 31.36 seconds, and the elevation of the piece 45 degrees.

Muzzle velocity. When the bullet leaves the muzzle of the rifle it is going 2700 feet a second, or roughly, $\frac{1}{2}$ mile a second, or 30 miles a minute.

Penetration. The following table shows the penetration of the rifle:



FIG. 26a

Piece held at
elevation of
45 degrees

MATERIAL	PENETRATION		
	100 yds.	500 yds.	1000 yds.
	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>
White-pine butts, made of 1-inch boards placed one inch apart	46.7	24.3	12.8
Moist sand		13.4	12.5
Dry sand		9.2	7.5
Low steel plate, .3843 inches thick	Through		
High steel plate, .1962 inches thick	Through		
Seasoned oak, across the grain		33.6	
Brick wall		5.0	

Life of the rifle. The life of the rifle, with reasonable care, with the present powder, is about 4000 rounds. It is estimated that a rifle fires about 400 rounds in one target season, so that it should, therefore, be good for at least ten years. (Par. 1, Bulletin No. 24, War Department, 1913.)

The Assembled Parts and Their Operations

Most of the operating parts may be included under the **Bolt Mechanism** and **Magazine Mechanism**.

The **Bolt Mechanism** consists of the bolt, sleeve, sleeve lock, extractor, extractor collar, cocking piece, safety lock, firing pin, firing pin sleeve, striker, and mainspring. It is shown, assembled, in Fig. 27. The parts shown in the cut are *handle*, A; *sleeve*, B; *safety lock*, C; *cocking piece*, D; *safety lug*, E; *extractor*, F; *extractor collar*, G; *locking lugs*, H; *extractor tongue groove*, I; and *gas escape hole*, J.

The bolt moves backward and forward and rotates in the well of the receiver; it carries a cartridge, either from the magazine, or one placed by hand in front of

it, into the chamber and supports its head when fired.

The sleeve unites the parts of the bolt mechanism, and its rotation with the bolt is prevented by the lugs on its sides coming in contact with the receiver.

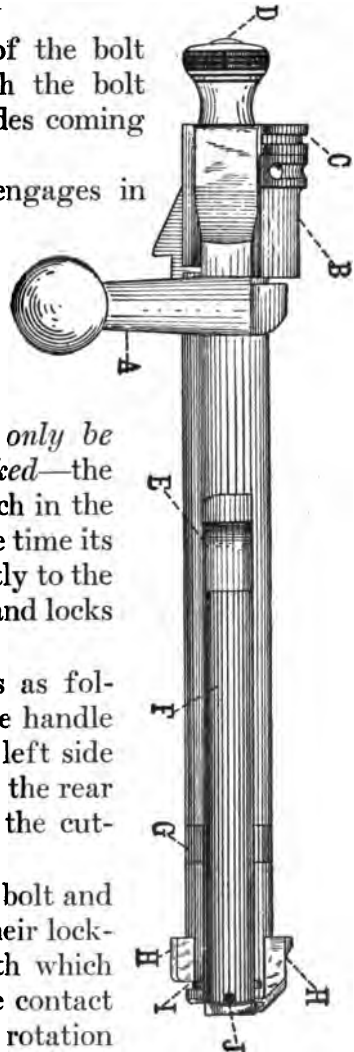
The hook of the extractor engages in the groove of the cartridge case and retains the head of the latter in the countersink of the bolt until the case is ejected.

The safety lock, when turned to the left, is inoperative; when turned to the right—which can only be done when the piece is cocked—the point of the spindle enters its notch in the bolt and locks the bolt; at the same time its cam forces the cocking piece slightly to the rear, out of contact with the sear, and locks the firing pin.

The bolt mechanism operates as follows: To open the bolt, raise the handle until it comes in contact with the left side of the receiver and pull directly to the rear until the top locking lug strikes the cut-off.

Raising the handle rotates the bolt and separates the locking lugs from their locking shoulders in the receiver, with which they have been brought into close contact by the powder pressure. This rotation causes the cocking cam of the bolt to force the firing pin to the rear, drawing the point of the striker into the bolt,

FIG. 27



rotation of the firing pin being prevented by the lug on the cocking piece projecting, through the slot in the sleeve, into its groove in the receiver. As the sleeve remains longitudinally stationary with reference to the bolt, this rearward motion of the firing pin, and consequently of the striker, will start the compression of the mainspring, since the rear end of the latter bears against the front end of the barrel of the sleeve and its front end against the rear end of the firing pin sleeve.

When the bolt handle strikes the receiver, the locking lugs have been disengaged, the firing pin has been forced to the rear until the sear notch of the cocking piece has passed the sear nose, the cocking piece nose has entered the cock notch in the rear end of the bolt, the sleeve lock has engaged its notch in the bolt, and the mainspring has been almost entirely compressed.

During the rotation of the bolt a rear motion has been imparted to it by its extracting cam coming in contact with the extracting cam of the receiver, so that the cartridge case will be started from the chamber.

The bolt is then drawn directly to the rear, the parts being retained in position by the cocking piece nose remaining in the cock notch and locked by the sleeve lock engaging its notch in the bolt.

To close the bolt, push the handle forward until the extracting cam on the bolt bears against the extracting cam on the receiver, thereby unlocking the sleeve from the bolt, and turn the handle down. As the handle is turned down the cams of the locking lugs bear against the locking shoulders in the receiver, and the bolt is forced slightly forward into its closed position. As all movement of the firing pin is prevented by the sear nose

FIG. 28

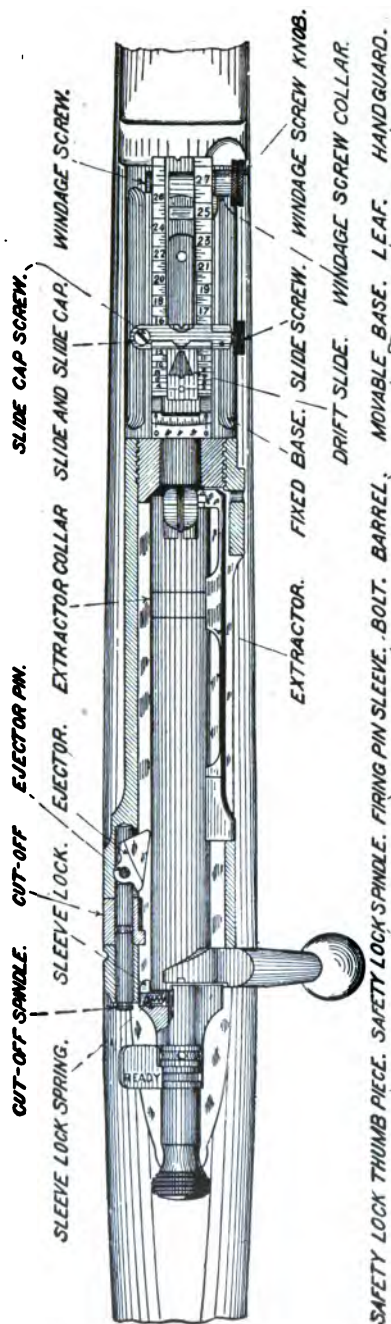
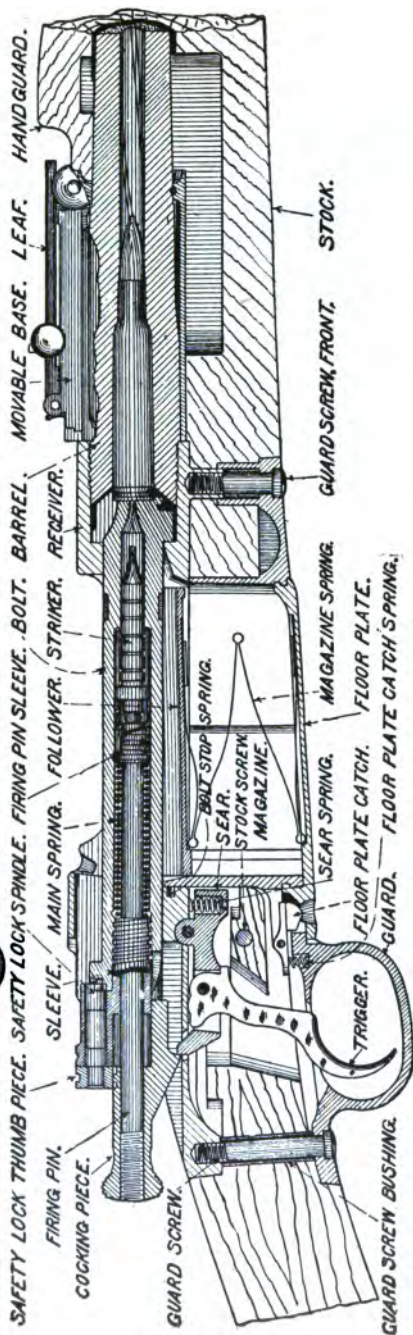


FIG. 29



engaging the sear notch of the cocking piece, this forward movement of the bolt completes the compression of the mainspring, seats the cartridge in the chamber, and, in single loading, forces the hook of the extractor into the groove of the cartridge case. In loading from the magazine the hook of the extractor, rounded at its lower edge, engages in the groove of the top cartridge as it rises from the magazine under the action of the follower and magazine spring.

The position then occupied by the parts is shown in Fig. 28 and Fig. 29, and the piece is ready to fire.

To pull the trigger, the finger piece must be drawn to the rear until contact with the receiver is transferred from its bearing to the heel, which gives a creep to the trigger, and then until the sear nose is withdrawn from in front of the cocking piece.

Just before the bolt is drawn fully to the rear, the top locking lug strikes the heel of the ejector, throwing its point suddenly to the right in the lug slot. As the bolt moves fully to the rear, the rear face of the cartridge case strikes against the ejector point and the case is ejected, slightly upward and to the right, from the receiver.

Double loading from the magazine is prevented by the extractor engaging the cartridge case as soon as it rises from the magazine and holding its head against the face of the bolt until ejected.

It will be noted that in this system of bolt mechanism the compression of the mainspring, the seating of the cartridge in and the starting of the empty case from the chamber are entirely done by the action of cams.

The piece may be cocked either by raising the bolt handle until it strikes the left side of the receiver and then immediately turning it down or by pulling the cocking piece directly to the rear.

In firing, unless the bolt handle is turned fully down the cam on the cocking piece will strike the cocking cam on the bolt, and the energy of the mainspring will be expended in closing the bolt, instead of on the primer; this prevents the possibility of a cartridge being fired until the bolt is fully closed.

The opening and closing of the bolt should each be done by one continuous motion.

The **Magazine Mechanism** includes the floor plate, follower, magazine spring, and cut-off.

Fig. 30 represents a cross section through the ejector with the magazine loaded. The parts shown are *receiver, A; bolt, B; firing pin, C; ejector, D; clip slots, E; bolt locking lug channels, F; magazine, G; follower, H; magazine spring, I; and floor plate, J.*

FIG. 30

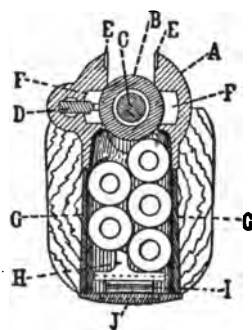


FIG. 31

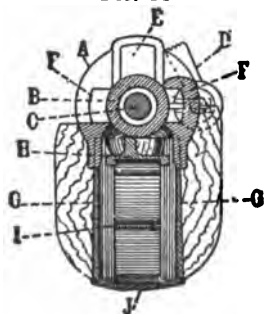


Fig. 31 shows a cross section through the magazine with the magazine empty, and with cut-off "on," shown in projection. The parts are *receiver, A; bolt, B; firing pin, C; cut-off, D; rear lug slot, E; bolt locking lug channels, F; magazine, G; follower, H; magazine spring, I; and floor plate, J.*

To charge the magazine, see that the cut-off is turned up showing "on," draw the bolt fully to the rear, insert the cartridge from a clip, or from the hand, and close the bolt. To charge the magazine from a clip, place either end of a loaded clip in its seat in the receiver and, with the thumb of the right hand, press the cartridges down into the magazine until the top cartridge is caught by the right edge of the receiver. The manner in which the cartridges arrange themselves in the magazine and the position of the follower and compressed magazine spring are shown in Fig. 30. The cartridge ramp guides the bullet and cartridge case into the chamber. The magazine can be filled, if partly filled, by inserting cartridges one by one.

Pushing the bolt forward, after charging the magazine, ejects the clip.

When the cut-off is turned down, the magazine is "off." The bolt can not be drawn fully back, and its front end projecting over the rear end of the upper cartridge holds it down in the magazine below the action of the bolt. The magazine mechanism then remains inoperative, and the arm can be used as a single-loader, the cartridges in the magazine being held in reserve. The arm can readily be used as a single-loader with the magazine empty.

When the cut-off is turned up, the magazine is "on"; the bolt can be drawn fully to the rear, permitting the top cartridge to rise high enough to be caught by the bolt in its forward movement. As the bolt is closed this cartridge is pushed forward into the chamber, being held up during its passage by the pressure of those below.

The last one in the magazine is held up by the follower, the rib on which directs it into the chamber.

In magazine fire, after the last cartridge has been fired and the bolt drawn fully to the rear, the follower rises and holds the bolt open to show that the magazine is empty.

Precautions

If it is desired to carry the piece cocked, with a cartridge in the chamber, the bolt mechanism should be secured by turning the safety lock to the right. Under no circumstances should the firing pin be let down by hand on a cartridge in the chamber.

To obtain positive ejection, and to insure the bolt catching the top cartridge in magazine, when loading from the magazine, the bolt must be drawn fully to the rear in opening it.

When the bolt is closed, or slightly forward, the cut-off may be turned up or down, as desired. When the bolt is in its rearmost position, to pass from loading from the magazine to single loading it is necessary to force the top cartridge or followed below the reach of the bolt, to push the bolt slightly forward and to turn the cut-off down, showing "off."

In case of a misfire it is unsafe to draw back the bolt immediately, as it may be a case of hang fire. In such cases the piece should be cocked by drawing back the cocking piece.

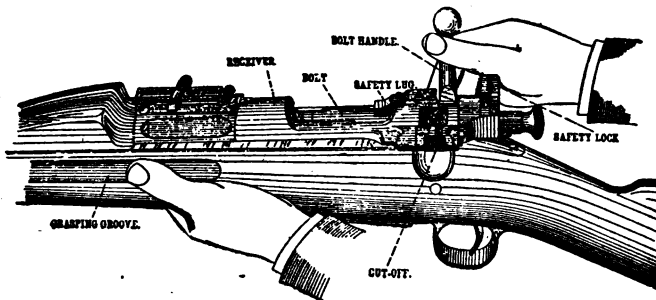
It is essential for the proper working and preservation of all cams that they be kept lubricated.

Dismounting and Assembling by Soldier

The bolt and magazine mechanism can be dismounted without removing the stock. The latter should never

be done, except for making repairs, and then only by some selected and instructed man.

FIG. 32

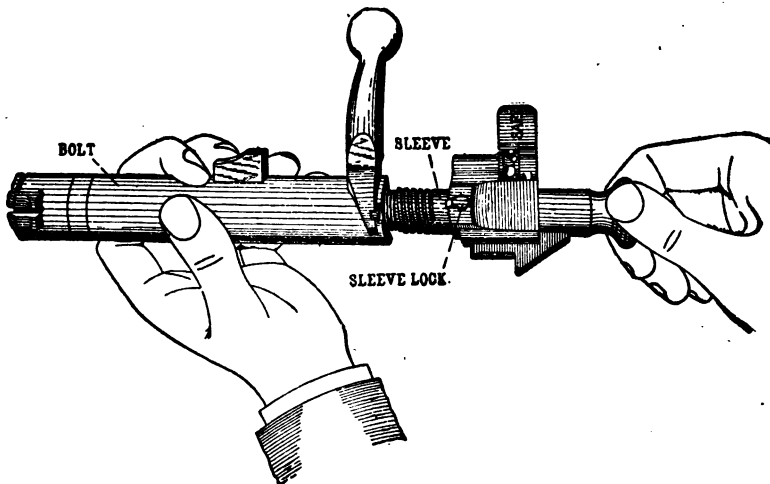


To Dismount Bolt Mechanism

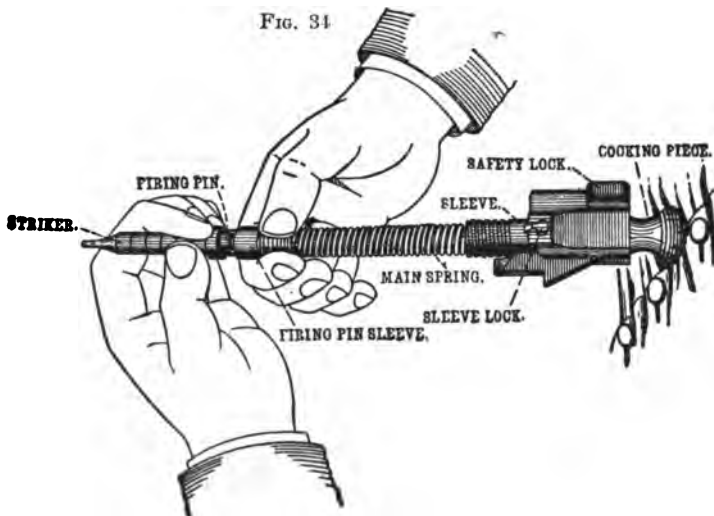
Place the cut-off at the center notch; cock the arm and turn the safety lock to a vertical position, raise the bolt handle and draw out the bolt (Fig. 32).

Hold bolt in left hand, press sleeve lock in with thumb of right hand to unlock sleeve from bolt, and unscrew sleeve by turning to the left (Fig. 33).

FIG. 33



Hold sleeve between forefinger and thumb of the left hand, draw cocking piece back with middle finger and thumb of right hand, turn safety lock down to the left with the forefinger of the right hand, in order to allow the cocking piece to move forward in sleeve, thus partially relieving the tension of mainspring; with the cocking piece against the breast, draw back the firing pin sleeve with the forefinger and thumb of right hand and hold it in this position (Fig. 34) while removing the striker with the left hand; remove firing pin sleeve and mainspring; pull firing pin out of sleeve; turn the extractor to the right, forcing its tongue out of its groove in front of the bolt, and force the extractor forward (Fig. 35) and off the bolt.

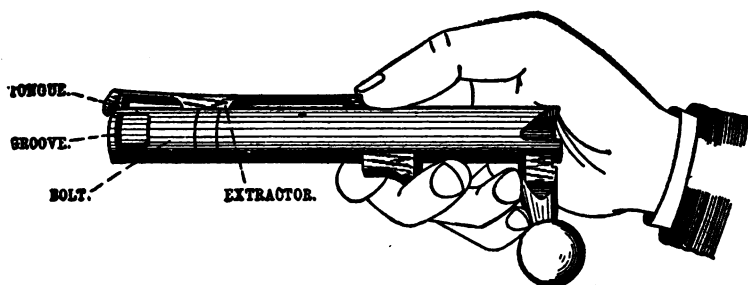


To Assemble Bolt Mechanism

Grasp with the left hand the rear of the bolt, handle up, and turn the extractor collar with the thumb and

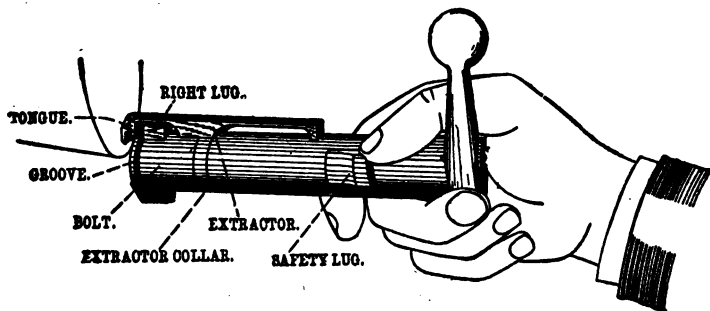
forefinger of the right hand until its lug is on a line with the safety lug on the bolt; take the extractor in the

FIG. 35



right hand and insert the lug on the collar in the undercuts in the extractor by pushing the extractor to the rear until its tongue comes in contact with the rim on the face of the bolt (a slight pressure with the left thumb on the top of the rear part of the extractor assists in this operation); turn the extractor to the right until it is over the right lug; take the bolt in the right hand and press the hook of the extractor against the butt plate (Fig. 36) or some rigid object, until the tongue on the extractor enters its groove in the bolt.

FIG. 36



With the safety lock turned down to the left to permit the firing pin to enter the sleeve as far as possible, assemble the sleeve and firing pin; place the cocking piece against the breast and put on mainspring, firing pin sleeve, and striker (see Fig. 36). Hold the cocking pin between the thumb and forefinger of the left hand, and by pressing the striker point against some substance, not hard enough to injure it, force the cocking piece back until the safety lock can be turned to the vertical position with the right hand; insert the firing pin in the bolt and screw up the sleeve (by turning it to the right) until the sleeve lock enters its notch on the bolt.

See that the cut-off is at the center notch; hold the piece under floor plate in the fingers of the left hand, the thumb extending over the left side of the receiver; take bolt in right hand with safety lock in a vertical position and safety lug up; press rear end of follower down with left thumb and push bolt into the receiver; lower bolt handle; turn safety lock and cut-off down to the left with right hand.

To Dismount Magazine Mechanism

With the bullet end of a cartridge press on the floor plate catch (through the hole in the floor plate), at the same time drawing the bullet to the rear; this releases the floor plate.

Raise the rear end of the first limb of the magazine spring high enough to clear the lug on the floor plate and draw it out of its mortise; proceed in the same manner to remove the follower.

To assemble magazine spring and follower to floor plate, reverse operation of dismounting.

Insert the follower and magazine spring in the magazine, place the tenon on the front end of the floor plate in its recess in the magazine, then place the lug on the rear end of the floor plate in its slot in the guard, and press the rear end of the floor plate forward and inward at the same time, forcing the floor plate into its seat in the guard.

CHAPTER XII

CARE AND PRESERVATION OF THE RIFLE

Importance. The care of his rifle should be the soldier's first thought; for, if he would have it take care of him in time of danger, he must take care of it at all times.

It is a generally recognized fact that more rifles become inaccurate and unserviceable by the lack of care than by firing.

The instructions for taking care of the rifle are few and simple. Learn them well and *apply them constantly*,—it only requires a little care and patience. You will be well repaid for it. It may some day save your life.

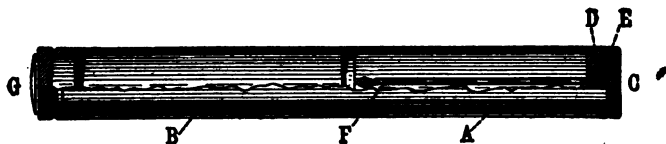
IMPLEMENTS AND MATERIALS FOR CLEANING

The following are the implements and materials used in cleaning the rifle:

Implements

The Oiler and Thong Case, Fig. 1, is carried in the butt of the stock. It consists of a metal tube about six inches long, divided by a partition into two sections;

FIG. 1



Oiler, A, in which a small supply of sperm or "3-in-1" oil is carried; and *Thong Case*, B, in which the thong and brush are carried.

The *Oiler* is fitted with a wire, F, which reaches to the bottom of the *oiler*, and is used for applying oil, a drop or more at the time.

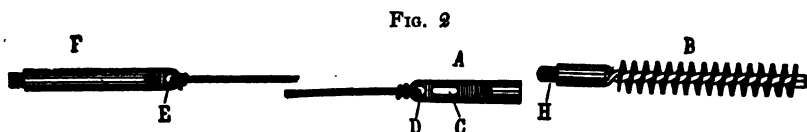
The oil is only for the lubrication of the working parts.

There is a leather pad on the outer end of the *Thong Case*, G, which prevents the noise that would result from the oiler striking the butt plate.

The *Oiler* and *Thong Case* should always be inserted in the stock so that the leather pad will be next to the butt plate.

The soldier should see that there is always a good supply of oil in the oiler.

The *Thong and Brush*, used in cleaning the bore of the rifle, are shown in this figure.



The *thong tip*, A, into which the *brush*, B, is screwed, is provided with a *rag slot*, C; one end of the thong or string, is fastened to the *tip* at D, and other end is fastened the *weight*, F, at E.

In cleaning the bore by means of the thong, the brush or rag should always be drawn from the muzzle toward the breech.

The thong and brush are used in the field, where it is not practicable to carry the cleaning rod.

The Cleaning Rod, Fig. 3, is of sufficient length to extend through the barrel.

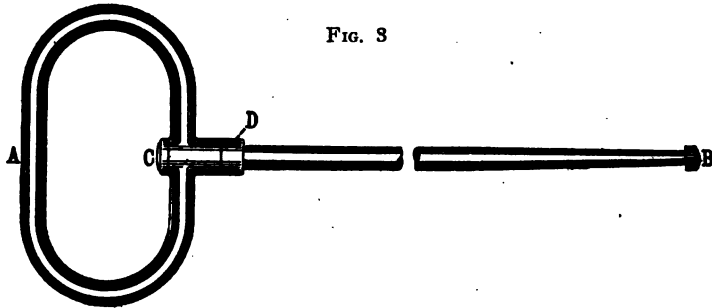


FIG. 3

Always insert the cleaning rod into the bore from the breech, and never from the muzzle, which it may injure if inserted from that end. The bolt must, of course, always be removed before the rod is inserted.

The cleaning rod is used in garrison and on the target range. It is easier to manipulate than the thong and brush, cleans the rifle better and is less liable to injure the bore.

The Screw driver, Fig. 4, has the *large blade*, A, the *small blade*, B, the *spur*, C, and the *pin*, D.

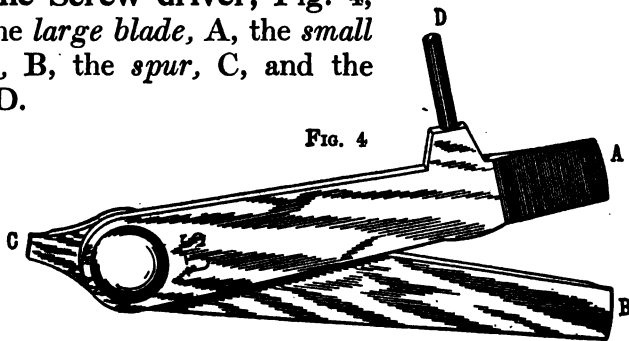


FIG. 4

The *large blade* should be used for the large butt plate screw, the butt plate cap screw, and the guard screws.

The *small blade* should be used on all other screws, except the cut-off spindle screw, for which the spur should be used.

The *pin* serves as a drift in removing the butt plate cap, ejector, floor plate catch, sear joint and trigger pins, and the band spring.

Materials

Ordnance Department Solutions and Oil. The following solutions and oil are furnished organizations by the Ordnance Department:

Soda solution. Used for removing the *powder* fouling from the bore.

Standard metal fouling solution. Used for removing the *metal* fouling from the bore.

Swabbing solution. Used in swabbing out the bore after the powder and the metal fouling have been removed.

Sperm Oil. Used in lubricating mechanism and other parts of rifle to reduce friction and also to prevent rust.

Hoppe's Nitro Powder Solvent No. 9. The author would strongly recommend Hoppe's Nitro Powder Solvent No. 9 (sold at all post exchanges) for cleaning out powder residue, and removing leading, nickel, and rust. After cleaning the bore be sure to pass through it a clean patch well saturated with "3-in-One" oil, as it will always prevent rusting in any climate.

The use of this powder solvent, per instructions on bottle, is simpler and less laborious than the use of the Ordnance Department solutions, and it accomplishes the same thing fully as well.

"3-in-One Oil." The best and most satisfactory oil the author knows of is "3-in-One Oil," which is sold at all post exchanges. In addition to being a very high grade oil, it is put up in a handy can with a screw-top neck, which makes the most convenient oil container on the market. This oil is used more than any other in the Army, the Marine Corps and the National Guard for cleaning and lubricating rifles and for preventing rust.

How to apply oil. Do not pour or squirt oil on the rifle.

Put a few drops on a piece of clean cloth, preferably cotton, and rub with the cloth, thereby avoiding the use of an unnecessary amount.

Cams and bearings can be oiled this way. However, if the oiler is used instead because of greater ease in reaching them, oil them *lightly*. To soak with oil accomplishes no more than to cover with a light coating,—it merely results in excessive, undesirable smearing and a waste of oil.

Care of the Bore

It requires work. The bore of the rifle is manufactured with the greatest care in order that a high degree of accuracy may be obtained, and it should, therefore, be properly cared for.

The proper care of the bore requires conscientious, careful work, but it pays well in reduced labor of cleaning and in prolonged accuracy life of the rifle, and better results in target practice.

How to clean the bore. With the cleaning rod the bore must always be cleaned from the breech,—never from the muzzle. Cleaning from the muzzle is liable to

wear and otherwise injure the mouth of the barrel, which is easily injured and thus the piece rendered inaccurate.

First, remove the bolt from the rifle, place the muzzle on the floor, a board or piece of canvas, and do not remove it therefrom while the cleaning-rod is in the bore. Never place the muzzle on the bare ground, lest dirt should get into it. (Note. Of course, if a rack is provided for cleaning rifles, it should be used instead of placing the muzzle on the floor.)

To clean the bore use patches of rag, preferably cotton flannel, cutting them into squares of such size that they may easily run through the barrel.

What care of the bore consists of. Briefly stated, the care of the bore consists of removing the fouling resulting from firing to obtain a chemically clean surface, and then coating this surface with a film of oil to prevent rusting.

Kinds of fouling. The fouling which results from firing is of two kinds,—the *powder fouling*, from the burning of the powder; and the *metal fouling*, from the nickel scraped off the bullet as it passes through the bore.

The *powder fouling* is highly corrosive; that is, it causes rust and eats into the metal, and it must, therefore, be removed as soon as possible.

The *metal fouling* itself will not cause rust, but it may cover the powder fouling and thus prevent the cleaning material from getting at the powder fouling, which, as stated before, will eat into the metal. When metal fouling accumulates in noticeable quantities it reduces the accuracy of the rifle.

How to remove powder fouling. Powder fouling may be readily removed by scrubbing the bore with hot soda solution, but this solution has no effect on the metal fouling.

It is, therefore, necessary to remove all metal fouling before we are sure that all powder fouling has been removed and that the bore may be safely oiled.

Ordinarily, after firing a barrel in good condition, the metal fouling is so slight as to be hardly perceptible, and is easily removed by solvents.

However, due to the accumulation of metal fouling, pitting (little hollows in the metal) or the presence of dust, or other abrasives (substances that cause the metal to wear away by rubbing), the fouling may occur in clearly visible flakes or patches and be much more difficult to remove.

How to remove metal fouling. After scrubbing out the bore with the soda solution, plug it from the breech with a cork at the front end of the chamber or where the rifling begins.

Slip one of the 2-inch sections of rubber hose over the muzzle down to the sight and fill with the standard solution to at least one-half inch above the muzzle of the barrel.

Let it stand for 30 minutes, then pour out the solution, remove the hose and breech plug, and swab out thoroughly with soda solution to neutralize and remove all trace of ammonia and powder fouling.

Wipe the barrel clean, dry, and oil with "3-in-One."

With few exceptions, one application is sufficient, but if all fouling is not removed, repeat the operation.

How to proceed in cleaning the bore.

To clean the bore after firing, proceed as follows:

Swab out the bore with soda solution to remove powder fouling. A convenient way to do this is to insert the muzzle of the rifle into the can containing the solution and with the cleaning-rod inserted from the breech, pump the barrel full a few times.

Remove and dry with a couple of patches of cloth. Examine to see whether any patches of metal fouling are in evidence, and if so, then remove same as explained above. If no metal fouling is in evidence, then swab out with the swabbing solution. The amount of swabbing required with the swabbing solution can be determined only by experience assisted by the color of the patches of cloth. Ordinarily a couple of minutes' work is sufficient. Dry thoroughly, and oil.

As a measure of safety a patch should always be run through the bore on the next day and the bore examined to insure that cleaning has been properly done. The bore should then be oiled again.

Necessity for preventing formation of pits. It is a fact recognized by all that a highly polished steel surface rusts much less easily than one which is roughened; also that a barrel which is pitted, fouls much more rapidly than one which is smooth. Every effort, therefore, should be made to prevent the formation of pits, which are merely enlarged rust spots, and which not only affect the accuracy of the piece but also increase the labor of cleaning.

If swabbing solution or standard metal fouling solution is not available, the barrel should be scrubbed

as already described, with the soda solution, dried, and oiled with "3-in-One." At the end of 24 hours it should again be cleaned, when it will usually be found to have "sweated." Usually a second cleaning is sufficient, but to insure safety it should be again examined at the end of a few days, before final oiling.

Of course, the swabbing solution should always be used, if available, for it must be remembered that each "puff" when the bore "sweats" is an incipient rust pit.

What has just been said contemplates the use of the solutions furnished by the Ordnance Department. As stated before, however, the same result will be obtained with less labor if Hoppe's Nitro Powder Solvent No. 9 is used.

How to oil a barrel. The proper method of oiling a barrel is as follows:

Wipe the cleaning rod dry; select a clean patch of cloth and smear it well with sperm or warmed cosmic oil, being sure that the cosmic has soaked into the patch well; scrub the bore with patch, finally drawing the patch smoothly from the muzzle to the breech, allowing the cleaning rod to turn with the rifling. The bore will be found now to be smooth and bright so that any subsequent rust or "sweating" can be easily detected by inspection. (By "sweating" is meant, rust having formed under the coating of metal fouling where powder fouling was present, the surface is puffed up.)

Care of the chamber. The chamber of the rifle is often neglected because it is not readily inspected.

Care should be taken to see that it is cleaned as thoroughly as the bore. A roughened chamber delays greatly the rapidity of fire, and not infrequently causes shells to stick.

The bolt. To clean the bolt, remove; clean all parts thoroughly with an oily rag; dry, and before assembling *lightly* oil the firing-pin, the barrel of the sleeve, the striker, the well of the bolt and all cams.

The sights. Both the front and rear sights should be cared for just as you would care for the works of your watch. If the sights are injured, the rifle will not shoot as aimed.

The front sight cover issued by the Ordnance Department protects the front sight.

The magazine. The magazine should be kept clean and covered with a thin coat of oil.

The stock. The stock should receive a light coat of raw linseed oil once a month, or after any wetting from rain, dew, etc. The oil should be thoroughly rubbed in with the hand.

Care of the mechanism. When the rifle has been wet or exposed to unfavorable climatic conditions, the bolt should be withdrawn and all working parts carefully wiped with a dry cloth, and then gone over with an oily rag.

The same thing should be done after firing.

All working parts should habitually be *lightly* oiled with a thin-bodied oil, such as sperm oil. ("3-in-One" oil is recommended.)

The care of all metal parts. All metal parts of the rifle should be kept clean and free from rust.

Cams and bearings. All cams and bearings must be kept constantly oiled.

Remember

1. It is easier to prevent than to remove rust.
2. To remove rust, apply oil with a rag, and let it stand for awhile so as to soften the rust; then wipe with a dry rag.

3. Emery paper or a burnisher must never be used in removing rust, for it also removes the bluing.

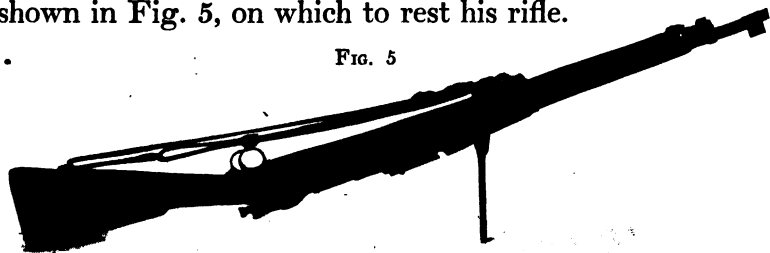
However, an ordinary rubber eraser will be found very serviceable for removing rust.

4. To prevent rust and dirt in the bore, run a rag through at least once each day

5. Never, under any circumstances, put away a rifle that has been fired or exposed to bad weather, without first cleaning it.

6. Never lay your rifle flat on the ground. Not only is there danger of dirt or other foreign matter getting into the bore, but a vehicle may run over it, or some one may step on the sight. Always rest it up securely against something. On the target range it is well for every soldier to have a short wood or metal fork, as shown in Fig. 5, on which to rest his rifle.

FIG. 5



7. In coming to the order from any position, always bring the rifle to the ground gently.

Army Regulations Regarding the Rifle

Are enlisted men allowed to take their arms apart?

No; not unless they have the permission of a commissioned officer, and even then only under proper supervision and in the manner prescribed in the descriptive pamphlet issued by the Ordnance Department. (A. R. 292.)

(Except when repairs are needed, the following named parts should never be dismounted by the soldier, and whenever they are taken apart they should be removed only by the artificer, or someone else familiar with the handling of tools and delicate mechanism: Bolt stop, cut off, safety lock, sleeve lock, front sight, front sight movable stud, lower band, upper band and stacking swivel screws.

(Unless the screw driver is handled carefully and with some skill the screws are sure to be injured either at the head or thread. The soldier may dismount the bolt and magazine mechanism for the purpose of cleaning them, but he is not permitted to do any further dismounting without the authority of a commissioned officer.)

Is the polishing of blued and browned parts permitted?

No, and rebluing, rebrowning, putting any portion of an arm in fire, removing a receiver from a barrel, mutilating any part by firing otherwise, and attempting

to beautify or change the finish, are prohibited. However, the prohibition of attempts to beautify or change the finish of arms is not construed as forbidding the application of raw linseed oil to the wood parts of arms. This oil is considered necessary for the preservation of the wood, and it may be used for such polishing as can be given when rubbing in one or more coats when necessary. The use of raw linseed oil only is allowed for redressing and the application for such purpose of any kind of wax or varnish, including heelball, is strictly prohibited. (Army Regulations 292.)

Is the use of tompons¹ in small arms permitted?

No, it is prohibited by regulations. (Army Regulations 292.)

Should pieces be unloaded before being taken to quarters or tents?

Yes, unless it is otherwise ordered. They should also be unloaded as soon as the men using them are relieved from duty. (Army Regulations 292.)

Should a loaded or unloaded rifle or revolver ever be pointed at anyone in play?

No, under no circumstances whatsoever. *A soldier should never point a rifle or revolver at a person unless he intends to shoot him.*

¹ Wooden stoppers or plugs that are put into the muzzles of rifles and other arms to keep out dirt and water.

CHAPTER XIII

HOW TO SHOOT¹

Value and importance of shooting straight. The value of a soldier as a fighting man is measured by his ability to shoot straight. If you can't shoot, you have no business on the firing line,—you merely take up room without accomplishing anything. In other words, you are in the way, and would be better off at home where you would not be risking your life unnecessarily, and would not be a useless burden to your officers.

From every standpoint it is to your advantage to learn to shoot. Not only does it mean more pay to you,² but it may some day mean more to you than all the riches in the world,—*it may save your life.*

If you ever go into battle, the consciousness that you can shoot as well as the other fellow, if not even a little better, will give you a comforting feeling of confidence that will mean more to you than all the extra pay you may have gotten for qualification in marksmanship. This comforting feeling of confidence will repay you a thousand times over for all the time, care and patience that you may have devoted to making yourself a good shot.

Remember, although you may not actually hit the other fellow, if you can shoot straight enough to make your bullets pass close to him, you will make him so

¹ The author is indebted to Capt. John W. Lang, 29th Inf., for valuable assistance in the preparation of this chapter.

² If you qualify as marksman, you get \$2 a month extra; as sharpshooter, \$3; as expert rifleman, \$5.

nervous that he will drop down behind cover and quit shooting, or his shots will all go wild.

Any man of normal eyesight and fair intelligence can, with determination and proper instruction, become a fair shot if not an excellent one.

Factors that enter into shooting. While there are a number of factors, some very important, others less so, that enter into shooting (for example, effect of light and wind, hold of piece, trigger squeeze, physical condition, etc.), none of them is especially difficult, and they can all be mastered by *determination and practice*.

Getting out of the rifle all there is in it. Our rifle is the best and most accurate rifle in the world.

There are certain things that it is capable of doing, *that it can be made to do*.

Whether the soldier can make his rifle do what it is capable of doing,—whether he can get out of it everything there is in it (all the hidden 4's and 5's),—whether he can make it come pretty nearly doing what he wants it to do,—depends upon the soldier's *determination and instruction*.

In other words, with his officers and noncommissioned officers to instruct him, it is entirely up to the soldier himself as to whether or not he becomes at least a marksman.

The trajectory. As the bullet passes through the air it makes a curved line something like this:

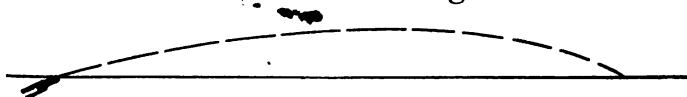


FIG. 1

This curved line is called the *trajectory*.

The resistance of the air and the force of gravity (the force that pulls all bodies toward the earth), are the two things that make the path of the bullet a curved line, just the same as they make the path of the baseball thrown by the player a curved line.

The resistance of the air holds the bullet back and the force of gravity pulls it down, so that the two acting together make the bullet's path curved.

The longer the range the more will the path of the bullet (the trajectory) be curved, as shown by the following drawing:

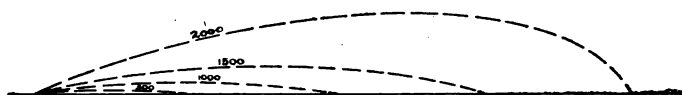


FIG. 2

The principle involved is the same as that involved in throwing a baseball. For example, if you throw a baseball very hard from third to first base, you can make it reach first base in almost a straight line, without going very high in the air, but if you wanted to throw the ball home from the outfield, you would have to throw it pretty high in order to get it there and its path (trajectory) would be curved very much. In other words, you've got to make allowance for the resistance of the air and the force of gravity.

An expert ball player knows, through practice, just how high it is necessary to throw a ball in order for it to reach certain points. A beginner does not know.

Sighting or Aiming. Now, on the rifle there are two "sights,"—the *front sight* and the *rear sight*,—which

enable the rifleman to regulate the path of the bullet, as the ball player regulates the path of the ball.

If the ball player wants distance, he throws the ball high (raises the path, the trajectory), using his eye and guesswork, and likewise if the rifleman wants to shoot at a distant target, he, too, shoots the bullet high (that is, he raises the muzzle of his rifle), but he doesn't have to depend upon guesswork. It is all worked out for him by experts and all he need do is to set the *rear sight* for the proper range,—that is, for the distance the object is from him.

Aiming or sighting a rifle consists in bringing into line three objects: The *target*, A, the *front sight*, B, and the *rear sight*, C.

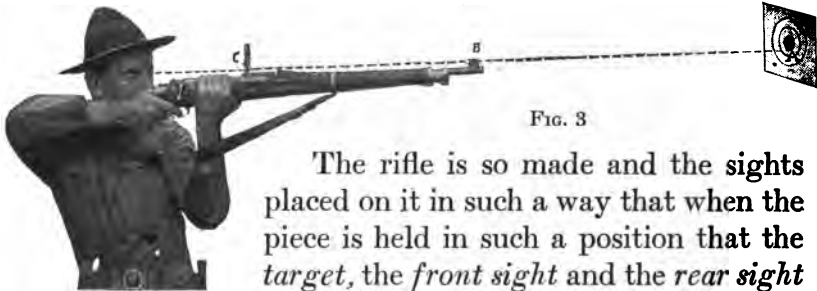
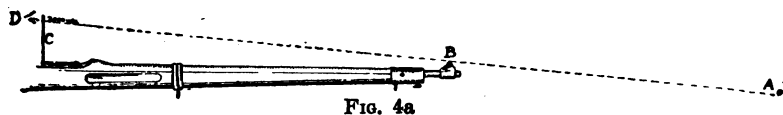
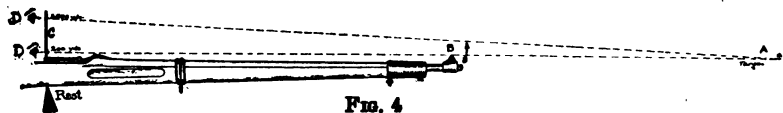


FIG. 3

The rifle is so made and the sights placed on it in such a way that when the piece is held in such a position that the *target*, the *front sight* and the *rear sight* are in line, and the trigger is pulled (squeezed) the bullet will strike the *target*.

You raise the muzzle of the piece by raising the rear sight,—that is, raising the rear sight has the effect of raising the muzzle, for the higher you raise the rear sight the higher must you raise the muzzle in order to see the front sight and get it in line with the object aimed at and the rear sight.

This is shown in the following illustrations:



The rear sight, C, the front sight, B, and the bull's eye, A, are all on a line with the eye, D, the rear sight being set for 200 yards.

Suppose we wanted to shoot at 2000 instead of 200 yards. We would raise the slide up to 20 (2000 yards) on the sight leaf.

In order to see the bull's eye through the notch sight at 2000, we must raise the eye to the position, D. We now have the rear sight, the bull's eye and the eye in line, but we must bring the front sight in line with them, which is done by raising the muzzle of the piece, giving the result shown in Fig. 4a.

Line of sight. With the open sight the line of sight is determined by a point on the middle line of the notch of the rear sight and the top of the front sight.

With the peep sight, the line of sight is determined by the *center* of the peep and the top of the front sight.

Different kinds of sights. The different kinds of sights are as follows:

Open sight. By *open sight* is meant the use of any one of the *sighting notches*.

To use the open sight:



FIG. 5

1. Look through the sighting notch at the target. (Fig. 5.)

2. Bring the top of the front sight on a line with the top and in the center of the sight notch, the top of the front sight being just under the bull's eye.



FIG. 6

Because of its wide field of view and its readiness in getting a quick aim with it, the open sight is the one that is generally used in the later stages of battle, or when fire is to start immediately.

The following positions of the front sight are incorrect:

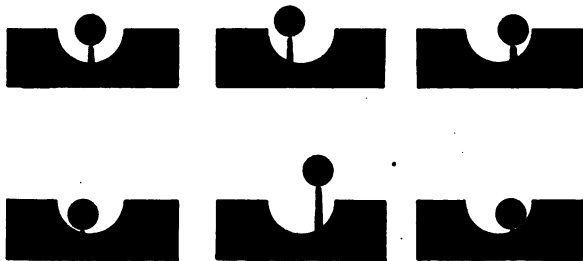


FIG. 6a

Peep sight. By *peep sight* is meant the use of the *peep hole* in the drift slide.

To use the *peep sight*:

1. Look through the peep hole at the target. (Fig. 7.)

2. Bring the top of the front sight to the center of the peep hole, the top of the front sight being just under the bull's eye.



FIG. 7

(Fig. 8.)

Be sure to get the top of front sight, as in Fig. 8, and not the bull's eye, as in Fig. 9, in center of the peep hole.



FIG. 8
Correct



FIG. 9
Incorrect

Advantage of the peep sight.

The advantage of the peep sight over the open sight is due to the fact that it is easier to center the top of the front sight in the peep hole and thus get the same amount of front sight each time.

For example, you know at once, without measuring, that the dots in the circles, Fig. 10, are not cen-



FIG. 10

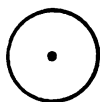


FIG. 11

tered, and that the one in the circle in Fig. 11, is.

After a little practice, in looking through the peep hole the eye almost automatically centers the top of the front sight.

Disadvantage of the peep sight. The disadvantage of the peep sight is that its limited field of view and lack of readiness in getting a quick aim with it limit its use to those stages of the combat when comparative deliberation will be possible.

What the rifleman looks at when he fires. The eye can be focused accurately upon objects at only one distance at a time; all other objects we see will be more or less blurred and fuzzy looking, depending upon their distance from the object upon which our eye is focused. Hold your finger up and look at it. You will see your finger clearly,—the rest of the hand and the arm will be more or less blurred,—objects about you will be seen

only indistinctly. Hold your hand in place, but focus your eye on some object beyond your finger on a line with your finger and your eye. You will still see your finger but it will now be fuzzy and indistinct.

In shooting we have three points which are placed in a line—the rear sight, the front sight and the target. It is impossible to focus the eye on all three at the same time. One must be chosen.

Which shall we choose?

The following illustrations show the appearance of the bull's eye, depending upon whether the eye is focused on the front sight, rear sight or bull's eye.

In Fig. 12 the eye is focused on the *bull's eye*. Notice how clear cut and distinct it is, and the blurring of the front and rear sights.



Peep normal sight



Open normal sight

FIG. 12

In Fig. 13 the eye is focused on the *front sight*. Notice how clear cut and distinct it is, and the blurring of the bull's eye.

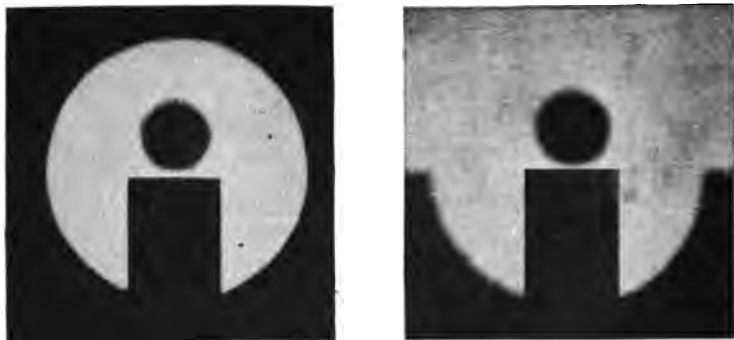


FIG. 13

In Fig. 14 the eye is focused on the *rear sight*. Notice how clear cut and distinct it is, and how blurred the front sight and the bull's eye are.

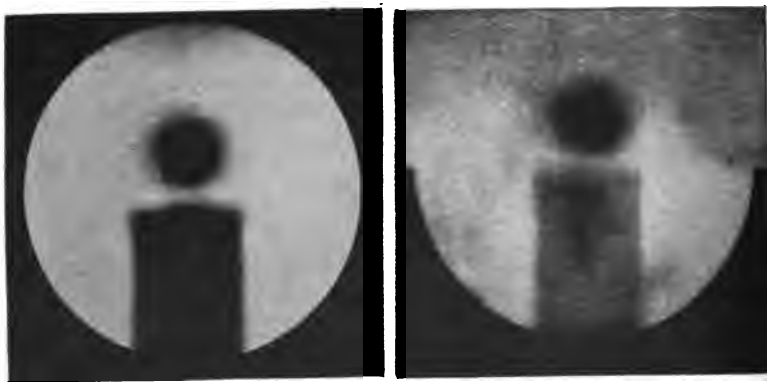


FIG. 14

The rifleman who attains proficiency *focuses his eye on the target while aiming*, but he glances at one sight and then the other to see that they are aligned properly,

then back at the target, and at the instant of discharge *his eye is on the target.*

Blurring is best overcome by using the peep sight, which may be compared to looking through a round window,—whatever blurring there is will be uniform and concentric and we can still center the **TOP OF THE FRONT SIGHT** without difficulty.

Normal sight. The amount of front sight taken in Figs. 12, 13 and 14, is called the normal sight and is the one that the soldier should always use, either with the open notch or peep sight, as it is the only sight which assures the taking of the same amount of front sight every time. In other words, it assures a greater degree of *uniformity* in sighting, which is one of the most important factors in shooting. By uniformity in sighting is meant taking the same amount of sight each time.

If you take *less* than the amount of front sight used in the normal sight, it will, of course, have the effect of *lowering* the muzzle of the piece, and consequently you will hit a point *lower* than if you had used the normal sight.

On the other hand, if you take *more* than the amount of front sight used in the normal sight, it will, of course, have the effect of *raising* the muzzle and consequently you will hit a point *higher* than if you had used the normal sight.

Fine sight. Although occasionally a man will be found who can get good results by using the fine sight, the average man cannot, and this form of sighting is, therefore, to be avoided.



FIG. 15
Fine sight

Full sight. The so-called *full sight* must be avoided under all circumstances. It is merely mentioned and shown here to point out a fault that must be carefully avoided.



FIG. 16
Full sight

The objections to its use are the same as in the case of the fine sight,—that is, lack of uniformity in the amount of sight taken.

Battle sight. By *battle sight* we mean the position of the rear sight with the leaf down. There is a sighting notch on the top of the leaf, or rather on top of the leaf slide which works up and down the leaf.

The battle sight is the only sight used in *rapid fire*. In unexpected, close encounters the side that first opens a rapid and accurate fire has a great advantage over the other. Again, a soldier on patrol generally has no time to set his sight, if suddenly attacked at close range. The battle sight, may, therefore, be called the *emergency sight*,—the *handy, quick sight*. The soldier should, therefore, become thoroughly familiar with the use of this sight.



FIG. 17
Battle sight

The *sighting notch* in the slide with the rear sight leaf down, is the same height as is the sighting in the drift slide when the rear sight leaf is raised and set at 530 yards.

That is to say, *battle sight* is equivalent to a sight setting of 530 yards. Therefore, in shooting with battle sight at objects nearer than 530 yards you must aim lower.

The following shows the trajectory of the bullet when *battle sight* is used:

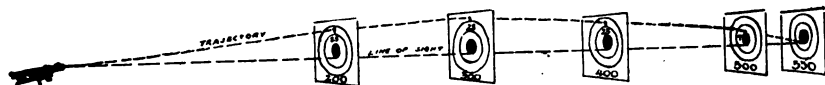


FIG. 18

That is to say, if you were aiming with the battle sight at an object 530 yards away, the bullet would pass 25 inches above an object of the same height at 200 yards, 28 inches above at 300, 23 inches above at 400, and 7 inches above one at 500, which is only another way of saying if shooting with battle sight at an object 200 yards away, you must aim 25 inches (about 2 feet) below the object in order to hit it; if at 300 yards, 28 inches ($2\frac{1}{2}$ feet below); if at 400 yards, 23 inches (about 2 feet) below; and if at 500 yards, 7 inches (about $\frac{1}{2}$ foot) below.

Remember that in the case of the battle sight, the position of the slide is immaterial, except as regards accuracy in sighting,—that is, it is immaterial whether the slide is well forward or well back. However, as regards accuracy in sighting, the position of the slide does make a difference, for the greater the distance between the front and rear sights, the more accurate will the sighting be. Hence, the slide should always be as far back as possible.

SIGHTING, POSITION AND AIMING DRILLS

The importance of the following sighting, position and aiming drills cannot be overestimated. If they are carefully practiced, before firing a single shot at a tar-

get, you will have learned how to aim your piece correctly, hold your rifle steadily, squeeze the trigger properly, assume that position best adapted to the particular conformation of your body, and you will also have acquired the quickness and manual skill required for handling the piece in rapid fire.

The sighting, position and aiming drills teach the fundamental principles of shooting, which are the foundation upon which marksmanship is built.

Do not confine yourself to going through these drills only during drill hours, but go through them frequently at other times. The extent to which it will improve your shooting will more than repay you for your trouble.

SIGHTING DRILLS

Object. The objects of the sighting drill are:

1. To show how to bring the rear sight, the front sight and the target into the same line,—that is, to show how to sight properly.

2. To discover and point out errors in sighting,—in other words, to discover the errors you make in sighting and show the reasons for same, so that you may be able to correct them properly.

8. To teach uniformity in sighting,—that is, to teach you how to take the same amount of sight each time,—to see every time the same amount of front sight when you look through the rear sight.

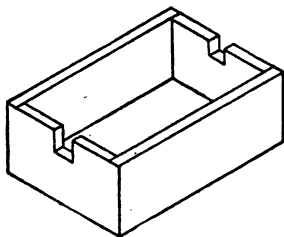


FIG. 19

Sighting rest for rifle. A good sighting rest for a rifle may

be made by removing the top from an empty pistol ammunition box, or a similar box, and then cutting notches in the ends of the box to fit the rifle closely. (Fig. 19.)

Place the rifle in these notches with the trigger guard close to and outside one end.

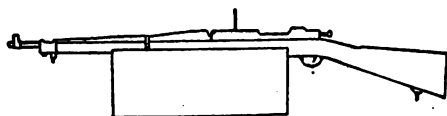


FIG. 19a

At a convenient distance above the ground fasten a blank sheet of paper on a wall or on a plank nailed to a stake driven into the ground.

Three legs are fastened to the rest (or it may be placed on the

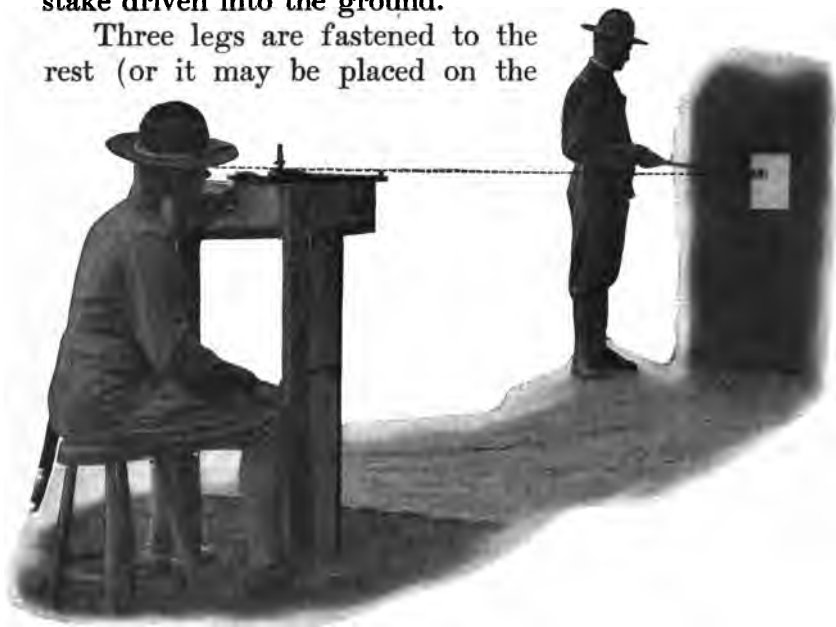


FIG. 20

ground without any legs), which is placed 20 or 30 feet from the blank sheet of paper.

Make sure that the piece is canted neither to the right nor left, and without touching the rifle or rest, sight the rifle near the center of the blank sheet of paper. (Fig. 20.)

Changes in the line of sight are made by changing the elevation and windage.

A soldier acting as marker is provided with a pencil and a small rod



FIG. 21

bearing at one end a small piece of white cardboard, with a black bull's-eye, pierced in the center with a hole just large enough to admit the point of a lead pencil.

The soldier sighting directs the marker to move the disk to the right, left, higher, or lower, until the line of aim is established when he commands, "Mark," or "Hold."

At the command "Mark," being careful not to move the disk, the marker records through the hole in the center the position of the disk and then withdraws it.

At the command "Hold," the marker holds the disk carefully in place without marking, until the position is verified by the instructor, and the disk is not withdrawn until so directed.

Point of Aim. Always be sure to aim at a point just below the black bull's-eye,—that is, aim so that

there will be a fine line of light between the bottom of the bull's-eye and the top of the front sight (Fig. 22). This is important to insure uniformity in sighting,—that is, in order to make sure that the same amount of the front sight is taken each time. If the top of the front sight touches the bottom of the bull's-eye it is impossible to say just how much of the front sight is seen.



FIG. 22

First Sighting Exercise

Using the sighting rest for the rifle (Fig. 20, page 24) require each man to direct the marker to move the disk until the rifle is directed on the bull's-eye with the *normal* sight and command, "Hold." If aiming correctly the rear sight, the front sight and the bull's-eye will look as shown in Fig. 22, above.

The instructor then verifies this line of sight. Errors, if any, will be pointed out to the soldier and another trial made. If he is still unable to sight correctly, he will be given as many more trials as may be necessary.

Sometimes a man does not know how to place the eye in the line of sight; he will look over or along one side of the notch of the rear sight and believe that he is aiming through the notch because he sees it at the same time that he does the front sight. Again some men in sighting will look at the front sight and not at the object.

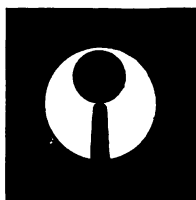


FIG. 23

Repeat the above exercise, using the *peep* sight. If aiming correctly, the rear

sight, the front sight and the bull's-eye will look as shown in Fig. 28.

Second Sighting Exercise

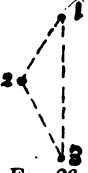
The triangle of sighting. Using the sighting rest for the rifle as before (Fig. 20, page 24), direct the marker to move the disk until the rifle is directed on the bull's-eye with the *normal* sight and command "Mark," whereupon the marker, being careful not to move the disk, records through the hole in its center, the position of the disk, and withdraws it. Then, being careful not to move the rifle or sights repeat the operation until three marks have been made.

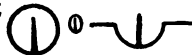
Join the three points by straight lines. The shape and size of the triangle will indicate the nature of the variations made in sighting.

For example, if you have taken the same aim each time, you will get a very small triangle something like this:  which resulted from taking each time this aim, for instance:



FIG. 25

A triangle like Fig. 26 results from not taking the same amount of front sight each time, as shown in Fig.  FIG. 26 27.



A triangle like Fig. 28 shows that the front sight was not in the middle of the notch each time, as shown in Fig. 29.

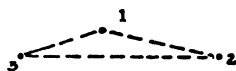


FIG. 28

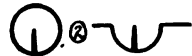


FIG. 29

A triangle like Fig. 30 results from a combination of the two errors mentioned above,—that is, not taking the same amount of front sight each time and not having the front sight in the middle of the notch each time, as shown in Fig. 31.



FIG. 30

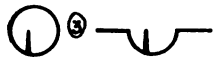
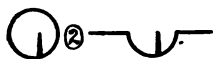
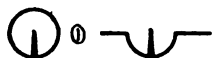


FIG. 29

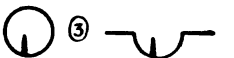


FIG. 31

If any one of the sides of the triangle is longer than one-half inch, the exercise is repeated, each sight being verified by the instructor, who will call the soldier's attention to his errors, if any.

The smaller the triangle, the better the sighting.

Verifying the triangle. If the sides of the triangle are so small that they indicate regularity in sighting, mark the center of the triangle and then place the center of the bull's-eye on this mark. The instructor then examines the position of the bull's-eye with reference to the line of sight. If the bull's-eye is properly placed with reference to the line of sight, the soldier aims correctly and with uniformity.

If the bull's-eye is not properly placed with reference to the line of sight, the soldier aims in a regular manner but with a constant error.

Causes of errors. If the bull's-eye is directly above its proper position, the soldier has aimed high,—that is, he has taken too little front sight.

If the bull's-eye is directly below its proper position, the soldier has aimed low,—that is, he has taken too much front sight.

If the bull's-eye is directly to the right or left of its proper position, the soldier has not sighted through the center of the rear notch and over the top of the front sight. If to the *right*, the soldier has either sighted along the *left* of the rear sight notch or the *right* side of the front sight, or has committed both of these errors.

If the bull's-eye is to the *left* of its proper place, the soldier has probably sighted along the *right* of the rear sight notch, or to the *left* of the front sight, or has committed both of these errors.

If the bull's eye is diagonally above and to the right, the soldier has probably combined the errors which placed it too high and too far to the right.

Any other diagonal position would be produced by a similar combination of vertical and horizontal errors.

After the above instruction has been given to one man, the line of sight will be slightly changed by moving the sighting rest or by changing the elevation and windage, and the exercises similarly repeated with other men.

Repeat the exercise, using the *peep* sight.

Third Sighting Exercise

This exercise shows the effect of canting the piece.

It is most important that in aiming the sights be kept vertical and the piece not be canted,—that is, that the barrel be not tilted over to the right or left.

If the piece is canted to the right, the sights are lowered to the right and consequently the bullet will strike to the right and below the point aimed at, even

though the rifle be otherwise correctly aimed and the sights correctly set.

Similarly if the piece is canted to the left the sights are lowered to the left, and consequently the bullet will strike to the left and low.

This effect of canting the piece may be shown as follows: Use the sighting rest with the rifle firmly held in the notches, the bolt removed.

Paste a black paster near the center of the bottom line of the target. Sight the rifle on this mark, using about 2000 yards' elevation. Then, being careful not to move the rifle, look through the bore and direct the marker to move the disk until the bull's-eye is in the center of the field of view and command, "Mark."

Next, turn the rest (with the rifle) over 90° to the right, on its side, and with the same elevation, sight on the same paster as above. Then, being careful not to move the rifle, look through the bore and again direct the marker to move the disk until the bull's-eye is in the center of the field of view and command, "Mark."

Not considering the fall of the bullet, the first mark represents the point struck with the sight vertical, the second mark represents the point struck, low and to the right, using the same elevation and the same point of aim, when the piece is canted 90° to the right.

Different degrees of canting the piece can be represented by drawing an arc of a circle through the two marks with the paster as a center. The second mark will be at a point on this arc corresponding to the degree of canting the piece.

It is important to know that this effect of canting increases with the distance from the target.

Fourth Sighting Exercise

This exercise is to show the advantage of blackened sights.

In strong sunlight, make a triangle of sighting, using a rifle having sights worn bright. Then, being careful not to move the rifle, blacken the sights and make another triangle.

Use dotted lines for the triangle with bright sights and full lines for the triangle made with blackened sights.

The position and size of the two triangles will plainly show the advantage of using blackened sights.

Fifth Sighting Exercise

This exercise is to illustrate the importance of knowing the effects of varying degrees of light.

In strong sunlight make a triangle of sighting. Then, being careful not to move the piece, make another triangle, the target and the man sighting having first been shaded.

The relative positions of the triangles will show the importance of knowing the effects of varying degrees of light.

POSITION AND AIMING DRILLS

Object. The object of the position and aiming drills are:

1. To so educate the muscles of the arm and body that the piece, during the act of aiming, shall be held without restraint, and during the operation of firing shall not be deflected from the target by any convulsive or improper movement of the trigger finger or of the body, arms, or hands.

2. They also establish between the hand and eye such prompt and intimate connection as will insure that the finger shall act upon the trigger, giving the final pressure at the exact moment when the top of the front sight is seen to be directed upon the mark.

3. If at the moment the piece is discharged, it is properly supported and correctly aimed, the mark will surely be hit.

Since any fairly intelligent man can be taught to aim correctly and to hold the sights aligned upon the mark with a fair amount of steadiness, it follows that bad shooting must necessarily arise from causes other than bad aiming. The chief of these causes is known to be the deflection given to the rifle when it is discharged, due to the fact that the soldier, at the moment of firing, instead of SQUEEZING the trigger, *jerks* it. This convulsive action is largely due to lack of familiarity with the methods of firing and to a constrained position of the muscles of the body, arm, and hands, which constrained position it is the object of the position and aiming drills to correct.

General. In order to correct any tendency to cant the piece, the rear sight is raised in all the exercises.

Place a black paster at which to aim on the wall opposite each man.

The squad being formed in single rank, with an interval of one yard between files, the instructor directs the men to take the position of "Ready," except that the position of the feet is such as to insure the greatest firmness and steadiness of the body. (Note. Some of our best shots turn the toes in, as in horseback riding, claiming that it stiffens the leg muscles and makes the support much steadier.)

The instructor then cautions, "Position and aiming drill."

The exercise which is being taught should be repeated frequently and made continuous. The instructor prefaces the preparatory command by, "Continue the motion," or "At will," and gives the command "Halt" at the conclusion of the exercise, when the soldier returns to the position of "Ready." Or the soldier may be made to repeat the first and second motions by the command "One," "Two," the exercise concluding with the command "Halt."

Care must be taken by the instructor not to make the position and aiming drills tedious. Thirty minutes daily should be spent in this practice during the period of preliminary instruction. After gallery practice is taken up, however, five or ten minutes daily should be sufficient for these exercises.

In order that the instructor may readily detect and correct errors the squads for these drills should not consist of more than eight men.

The instructor should avoid holding the squad in tiresome positions while making explanations or corrections.

Position Exercise

The instructor commands: 1. *Position.* 2. *Exercise.* At the command, "*Exercise,*" without moving the body or eyes, raise the rifle smartly to the front of the right shoulder to the full extent of the left arm, elbow inclined downward, the barrel nearly hori-

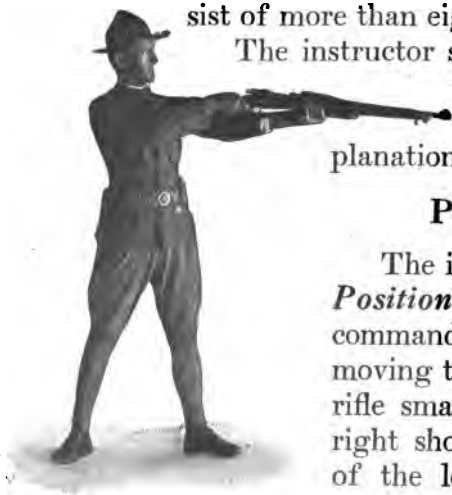


FIG. 32

zontal, muzzle slightly depressed, heel of the butt on a line with the top of the shoulder. (Fig. 32.)

(Two.) Bring the piece smartly against the hollow of the shoulder, without permitting the shoulder to give way, and press the rifle against it, mainly with the right hand, only slightly with the left, the forefinger of the right hand resting lightly against the trigger, the rifle inclined neither to the right nor left.

(Three.) Resume the position of ready. (Fig. 34.)

Remarks. The instructor should especially notice the position of each soldier in this exercise, endeavoring to give to each man an easy and natural position. He should see that the men avoid drawing in the stomach, raising the breast, or bending the small of the back.

The butt of the piece must be pressed firmly, but not too tightly, into the hollow of the shoulder and not against the muscles of the upper arm. If held too tightly, the pulsations of the body will be communicated to the piece; if too loosely, the recoil will bruise the shoulder. If only the heel or toe touches the hollow of the shoulder, the recoil may throw

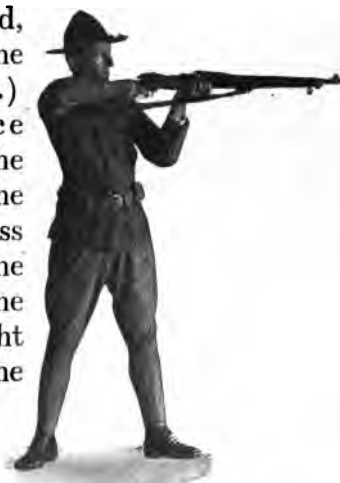


FIG. 33



FIG. 34

the muzzle down or up, affecting the position of the hit. While both arms are used to press the piece to the shoulder, the left arm should be used to direct the piece and the right forefinger must be left free to squeeze the trigger.

Aiming Exercise

The instructor will first direct the sights to be adjusted for the lowest elevation and subsequently for the different longer ranges.

The instructor commands: 1. *Aiming*. 2. *Exercise*.

At the last command execute the first and second motion of the position exercise.



FIG. 35

(Two.) Bend the head a little to the right, the cheek resting against the stock, the left eye closed, the right eye looking through the notch of the rear sight at a point slightly below the mark. (Fig. 35.)

(Three.) Draw a moderately long breath, let a portion of it escape, then, with the lungs in a state of rest, slowly raise the rifle with the left hand, being careful not to incline the sight to either side, until the line of sight is directly on the mark; hold the rifle steadily directed on the mark for a moment; then, without command and just before the power to hold the rifle steadily is lost, drop the rifle to the position of "Ready" and resume the breathing.

Remarks. Some riflemen prefer to extend the left arm. Such a position gives greater control over the rifle when firing in a strong wind or at moving objects. It also possesses advantages when a rapid as well as accurate delivery of fire is desired. Whatever the position, whether standing, kneeling, sitting, or prone, the piece should rest on the palm of the left hand, never on the tips of the fingers, and should be firmly grasped by all the fingers and the thumb.

The eye may be brought to the line of sight either by lowering the head or by raising the shoulder; it is best to combine somewhat these methods; the shoulder to be well raised by raising the right elbow and holding it well to the front and at right angles to the body.

If the shoulder is not raised, it will be necessary for the soldier to lower the head to the front in order to bring the eye into the line of sight. Lowering the head too far to the front brings it near the right hand, which grasps the stock. When the piece is discharged, this hand is carried by the recoil to the rear and, when the head is in this position, may strike against the nose or mouth. This often happens in practice, and as a result of this blow often repeated many men become gun-shy, or flinch, or close their eyes at the moment of firing. Much bad shooting, ascribed to other causes, is really due to this fault. Raising the right elbow at right angles to the body elevates the right shoulder, and lifts the piece so that it is no longer necessary to incline the head materially to the front in order to look along the sights.

As the length of the soldier's neck determines greatly the exact method of taking the proper position, the in-

structor will be careful to see that the position is taken without restraint.

Always be sure to hold the thumb along the small of the stock, as shown in Figs. 41-46; for, if the face is struck the thumb is the usual offender.

As changes in the elevation of the rear sight will necessitate a corresponding change in the position of the soldier's head when aiming, the exercise should not be held with the sight adjusted for the longer ranges until the men have been practiced with the sights as the latter would generally be employed for offhand firing.

The soldier must be cautioned that while raising the line of sight to the mark he must fix his eyes on the mark and not on the front sight; the latter can then be readily brought into the line joining the rear-sight notch and mark. If this plan be not followed, when firing is held on the range at long distances the mark will generally appear blurred and indistinct. The front sight will always be plainly seen, even though the eye is not directed particularly upon it.

The rifle must be raised slowly, without jerk, and its motion stopped gradually. In retaining it directed at the mark, care must be taken not to continue the aim after steadiness is lost; this period will probably be found to be short at first, but will quickly lengthen with practice. No effort should be made to prolong it beyond the time that breathing can be easily restrained. Each soldier will determine for himself the proper time for discontinuing the aim.

The men must be cautioned not to hold the breath too long, as a trembling of the body will result in many cases.

Some riflemen prefer, in aiming, to keep both eyes open but, unless the habit is fixed, the soldier should be instructed to close the left eye.

Trigger-Squeeze Exercise

The instructor commands: 1. *Trigger squeeze.*
2. **Exercise.** At the command **Exercise**, the soldier executes the first motion of the aiming exercise.

(Two.) The second motion of the aiming exercise.

(Three.) Draw a moderately long breath, let a portion of it escape, hold the breath and slowly raise the rifle with the left hand until the line of sight is on the mark, being careful not to incline the sights to either side. Take up the trigger slack, and then contract the trigger finger gradually, *contracting all the muscles of the whole hand*, slowly and steadily increasing the pressure on the trigger, while the aim is being perfected; continue the gradual increase of pressure so that when the aim has become exact the additional pressure required to release the point of the sear can be given almost insensibly and without causing any deflection of the rifle. Continue the aim a moment after the release of the firing pin, observe if any change has been made in the direction of the line of sight, and then resume the position of "Ready," cocking the piece by raising and lowering the bolt handle.

Remarks. Poor shooting is often the result of lack of proper coördination of holding the breath, the maximum steadiness of aim, and the squeeze of the trigger. By frequent practice in this exercise, each man may come to know the exact instant his firing pin will be released. He must be taught to hold the breath, bring

the sights to bear upon the mark, and squeeze the trigger all at the same time.

The Trigger Squeeze. The trigger should be *squeezed*, not pulled, the hand being closed upon itself as a sponge is squeezed, the forefinger sharing in this movement, remembering that the trigger slack must always be taken up before you begin to squeeze. The

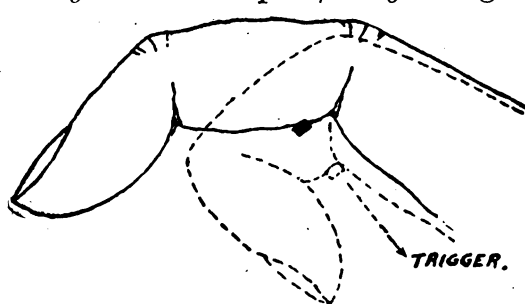


FIG. 36

forefinger should be placed as far around the trigger as to *press* it with the second joint. By practice the soldier becomes familiar with the trigger *squeeze* of his

rifle, and knowing this, he is able to judge at any time, within limits, what additional *pressure* is required for its discharge. By constant repetition of this exercise he should be able finally to *squeeze* the trigger to a certain point beyond which the slightest movement will release the sear. Having *squeezed* the trigger to this point, the aim is corrected and, when true, the additional pressure is applied and the discharge follows.

Rapid-Fire Exercise

Object. The object of this exercise is to teach the soldier to aim quickly and at the same time accurately in all the positions he will be called upon to assume in range practice.

The instructor commands: 1. *Rapid-fire exercise.*
2. **Commence Firing.** At the first command the first

and second motions of the trigger-squeeze exercise are performed. At the second command, the soldier performs the third motion of the trigger-squeeze exercise, squeezing the trigger without disturbing the aim or the position of the piece, but at the same time without undue deliberation. He then, without removing the rifle from the shoulder, holding the piece in position with the left hand, grasps the handle of the bolt with the right hand, *turns both hands toward each other*, rapidly draws back the bolt, closes the chamber, aims and again squeezes the trigger. This movement is repeated until the trigger has been squeezed five times, when, without command, the piece is brought back to the position of "Ready."

When the soldier has acquired some facility in this exercise, he will be required to repeat the movement ten times, and finally, by using dummy cartridges, he may, by degrees, gain the necessary quickness and dexterity for the execution of the rapid fire required in range firing.

Methods. The methods of taking position, of aiming, and of squeezing the trigger, taught in the preceding exercises, should be carried out in the rapid-fire exercise, with due attention to all details taught therein; the details being carried out as prescribed except that greater promptness is necessary. In order that any tendency on the part of the recruit to slight the movements of aiming and of trigger squeeze shall be avoided, the rapid-fire exercise will not be taught until the recruit is thoroughly drilled and familiar with the preceding exercises. The recruit will be instructed that with practice in this class of fire the trigger can be squeezed promptly without deranging the piece.

Repetition. If the recruit seems to execute the exercise hurriedly or carelessly, the instructor will require him to repeat it at a slower rate.

Manipulation of the Breech Mechanism. To hold the piece to the shoulder and, at the same time, manipulate the breech mechanism with the proper facility, are learned only after much practice. Some riflemen, especially men who shoot from the left shoulder, find it easier, in rapid firing, to drop the piece to the position of load after each shot. While at first trial this method may seem easier, it is believed that, with practice, the advantage of the former method will be apparent.

Position and Aiming Drill, Kneeling

These exercises will be repeated in the kneeling position by causing the squad to kneel by the commands prescribed in the Drill Regulations. The exercises will be executed as prescribed for standing, except that at the command "Two" in the position exercise, the soldier will rest the left elbow on the left knee, the point of the elbow in front of the kneecap. The pasters for the kneeling exercise should be at $2\frac{1}{2}$ feet from the floor or ground.

Remarks. Frequent rests will be given during practice in these exercises kneeling, as the position, if long continued, becomes constrained and fatigues the soldier unnecessarily.

In raising the rifle to the mark in the second and third exercises, the position of the left hand should not be changed, but the left forearm should be brought toward the body and at the same time the body bent slightly to the rear.

When aiming kneeling there is, from the nature of the position, a tendency to press the butt of the rifle against the upper arm instead of against the hollow of the shoulder; this will necessitate inclining the head considerably to the right to get the line of sight, and by bringing the rifle so far to the rear will, if the thumb is placed across the stock, cause it to give by the recoil a blow upon the nose or mouth.

These difficulties may be avoided by advancing the right elbow well to the front, at the same time raising it so that the arm is about parallel with the ground. The hollow of the shoulder will then be the natural place for the rifle butt, and the right thumb will be brought too far from the face to strike it in the recoil.

Some riflemen prefer, by bending the ankle, to rest the instep flat on the ground, the weight of the body coming more on the upper part of the heel; this obviates any tendency of the right knee to slip; or, by resting the right side of the foot on the ground, toe pointing to the front, to bring the weight of the body on the left side of the foot. These positions are authorized.

Choice of Position. In firing kneeling, the steadiness obtained depends greatly upon the position adopted. The peculiarities of conformation of the individual soldier exert when firing kneeling a greater influence than when firing either standing, sitting, or prone; the instructor should, therefore, carefully endeavor, noticing the build of each soldier, to place him in the position for which he is best adapted and which will exert the least tension or strain upon the muscles and nerves. It should be remembered, however, that without the rest of the left elbow on the knee this position possesses no advantage of steadiness over the standing position.

Kneeling Position; When Taken. The kneeling position can be taken more quickly than either the sitting or the prone position. It is, therefore, the position naturally assumed when a soldier, who is standing or advancing, has to make a quick shot at a moving or disappearing object and desires more steadiness than can be obtained standing.

Position and Aiming Drill, Sitting Down

In many cases the men, while able to kneel and hold the piece moderately steady, can obtain in a sitting position much better results. All should, therefore, be instructed in aiming sitting down as well as kneeling.

To practice the soldier in the preceding exercises in a sitting position, the squad being formed in a single rank, with an interval of one pace between files, the rifle should first be brought to "Order arms"; the instructor then commands: *Sit down.*

At this command make a half face to the right and, assisted by the left hand on the ground, sit down, facing slightly to the right, the left leg directed toward the front, right leg inclined toward the right, both heels, but not necessarily the bottoms of the feet, on the ground, the right knee slightly higher than the left; body erect and carried naturally from the hips; at the same time drop the muzzle of the piece to the front, and to the position of the first motion of load, right hand upon the thigh, just in front of the body, the left hand slightly above, but not resting upon, the left leg.

The exercise will be executed as heretofore prescribed, except that at the command "Two" (position exercise) the soldier will rest the left elbow on the left

knee, the point of the elbow in front of the kneecap, and the right elbow against the left or inside of the right knee, at the same time inclining the body from the hips slightly forward.

For the aiming and trigger-squeeze exercises the pasters, used as aiming points, will be $2\frac{1}{2}$ feet from the floor or the ground.

To afford the men rest or on the completion of the kneeling or sitting down exercises the instructor will command *Rise*, when the men rise, face to the front, and resume the "Order arms."

Remarks. If the preceding position is carefully practiced, steadiness is quickly attained. The right leg should not be carried so far to the right as not to afford a good support or brace for the right elbow.

This position may be modified, but, in general, not without impairing the steadiness of the man, by crossing the legs at the ankle, the outside of each foot resting upon the ground, body more erect, and the knees slightly more raised than in the previous position.

Position and Aiming Drill, Prone

From the nature of the position it is not practicable to execute these exercises according to the method followed when standing or kneeling. Instruction will, however, always be given with reference to the position, to the manner of assuming it, and to aiming and squeezing the trigger.

For this purpose the squad being formed as specified above, in the position and aiming drill, sitting down (the black plasters therein mentioned being about 12 inches from the ground), the squad will be brought to "Order arms."

Then (the squad either standing or kneeling), the instructor commands: *Lie down*, which will be executed as prescribed in the Drill Regulations; the legs may be spread apart and the toes turned out if found to give a steadier position.

After the squad has taken the position as prescribed above, the legs should be inclined well to the left, and either crossed or separated as the soldier prefers or as his particular conformation appears to render most desirable, and the body at the same time inclined slightly to the right.

With care and practice the soldier may acquire an easy position which he is able to assume with great facility.

Being at "Ready," the instructor then commands:

1. *Trigger squeeze.*
2. *Exercise.*

At the latter command carry the left elbow to the front and slightly to the right, the left hand under the barrel at the balance, weight of the body mainly supported by the left elbow, the right resting lightly on the floor or ground.

(Two.) Slide the rifle with the right hand through the left hand to the front until the left hand is a little in front of the trigger guard; at the same time raise the rifle with both hands and press it against the hollow of the shoulder.

(Three.) Direct the rifle upon the mark and carry out the further details of aiming and squeezing the trigger as prescribed in the trigger-squeeze exercise.

Then resume the position, lying down.

As soon as the men have acquired with accuracy the details of the position, they will be practiced, without

the numbers, in aiming and squeezing the trigger at will; after which the rapid-fire exercise in the prone position will be practiced, the necessary skill and dexterity being acquired by degrees.

To afford the men rest, or on completion of the exercise, the instructor will command: *Rise*, which is executed as prescribed in the Drill Regulations.

Remarks. The preceding position for firing lying down possesses in a greater degree than any other position the merit of adaptability to the configuration of the ground; it enables the soldier to deliver fire over low parapets or improvised shelters, thus making the best use of cover. The importance of training the soldier in firing from the other positions should not, however, be lost sight of, since from the prone position it will frequently be impossible to see the objective.

Back positions are not authorized.

In the prone position, when aiming, the left elbow should be well under the barrel, the other elbow somewhat to the right, but not so far as to induce any tendency to slip on the floor or ground.

The greater changes in elevation required in first directing the rifle on the object should be given by altering the position of the left hand under the barrel, the slighter changes only by advancing or withdrawing the shoulder.

As the body does not yield to the recoil, as when firing standing or kneeling, the force of recoil, if the rifle is not properly held, may severely bruise the soldier. It is one of the objects of this exercise to so teach him that this will be prevented by assuming a correct position. Care must be exercised that the butt is not brought

against the collar bone. By moving the shoulder slightly to the front or rear, and by moving the right elbow from the body or toward it, each soldier may determine the position in which the shoulder gives to the butt of the rifle the easiest rest. This will probably be the one in which the force of the recoil will be least felt.

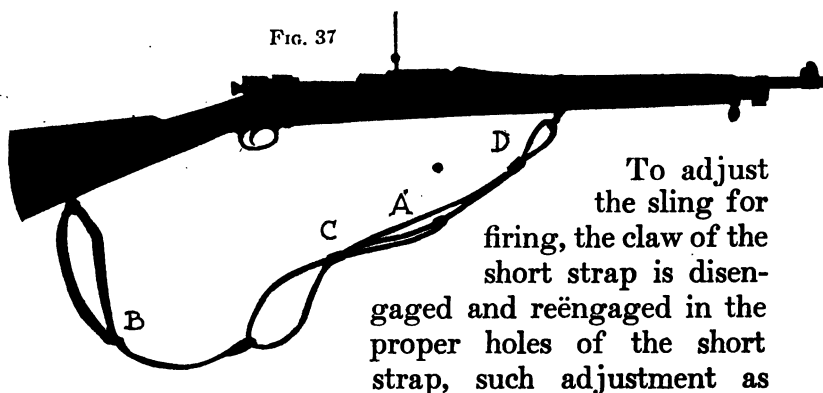
The soldier should persist in this exercise until he obtains a position in which he feels no constraint, which will not subject him to bruises from the recoil, and from which the mark appears plainly through the sights. Having secured such a position, he must not change it when firing, as a variation in the points of support of the rifle, the distance of the eye from the rear sight, or the tension of the hold has a decided effect, especially at the longer ranges, upon the location of the point struck.

Important. The soldier should be encouraged to go through these exercises frequently at other than drill hours, care being taken that, in the aiming and trigger-squeeze exercises, he always has some definite object for a mark.

Use of sling. After the soldier has been drilled in the proper standing, kneeling, sitting, and prone positions in the foregoing exercises, the use of the sling will be taught. Adjustments and their advantages will be taught with the idea of noninterference with quickness and freedom of action. The trigger-squeeze exercises will then be continued in the different positions, using the sling.

Description and adjustment. The sling is made up of four parts: the long strap, A, forming the arm loop; the stort strap, B; and the two keepers, C and D. At one end of each of the straps there is a metal claw,

used for adjusting the straps. At the other end of the short strap there is a metal loop through which the longer strap is passed; thus connecting the two traps.



may be necessary being also made in the long strap (the arm loop).

What the sling does. It does two things: (1) It steadies the rifle, and (2) helps to take up the recoil,—that is, to reduce the “kick.”

Its use. There are a number of different methods of using the sling. Experiment with different ones until you find and decide upon the method best suited to you.

The sling should be used in all firing,—combat practice as well as at target practice.

Always adjust the sling so that it will be tight.

Have the arm loop no longer than is necessary to reach the middle of the small of the stock. When on the arm, have the lower end of the arm loop well up near the arm pit, with the keeper well pressed down so as to hold the loop fast.

Note the proper adjustments of the sling for the different firing positions,—that is, standing, sitting, kneeling, and prone, and mark the adjustments on the inside of the arm loop, “St” (standing), “Si” (sitting, “K” (kneeling), and “P” (prone).

It is sometimes advisable to sew a piece of rope to your shirt sleeve to keep the sling from slipping down.



FIG. 38

To put on the sling. 1. Put your left hand in the loop, twisting the sling to the left, A, Fig. 38, and holding the rifle with the right hand as shown in the figure. Twisting the sling to the left causes a flat surface instead of the cutting edge of the sling to rest against the wrist.

2. Extend the arm on through the loop, (Fig. 39), bringing the loop

FIG. 39

well up near the pit of the arm, grasping the piece with the left hand, and pressing down keeper, A.

3. Place left hand between the sling and piece, (Fig. 40),



FIG. 40

the hand being pressed well forward toward the upper sling swivel, A. Notice how the back of the hand is resting against the flat of the sling.



4. Come to the position of aim, Fig. 41. Pressure is applied to the sling by pressing forward the left hand, and holding the rifle to the shoulder with the right hand. Remember that whatever pressure

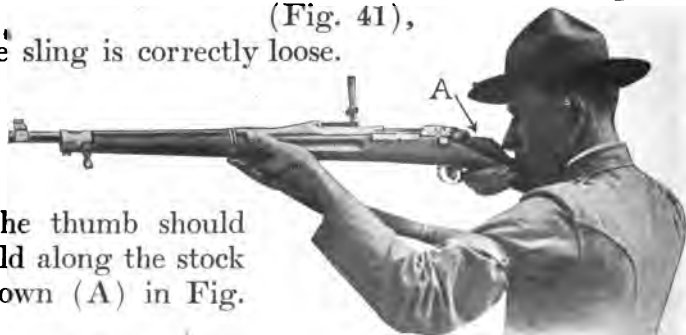


FIG. 41
Right side view

A you apply must be the same for each shot.

Notice (Figs. 41 and 42) how well forward the left hand is, and how the flat of the sling is resting against the wrist and back of hand. See how the short strap, C, (Fig. 41),

of the sling is correctly loose.



The thumb should be held along the stock as shown (A) in Fig. 42.

Holding of piece and position of body. While, because of differences in contour of body, it

FIG. 42
Left side view

is not possible for all men to hold the piece the same way and to assume the same positions of the body, there are certain basic principles in both the holding of the piece and the position of the body that must be observed to get the best results in shooting. For example, among which are: holding the left arm well under the piece in all firing



Side view

FIG. 43

positions except sitting; holding the left hand as near to the upper sling swivel as possible; placing cheek against stock and eye as close to cocking piece as possible; sling tight; point of elbows in kneeling and sitting positions to be slightly in front of knees.

Without violating any of these or other principles take hold of the piece and assume the position of the body that is most comfortable to you.



Front view

Fig. 43 and the following illustrations show various methods of using the sling, holding the piece and taking position.

Study them carefully, and try them out, for they are the ones that are used by our best shots.

Standing position. Fig. 43. Notice position of feet; body well balanced; right elbow raised; left elbow pressed close to body; head inclined well to right; sling passing under left arm



FIG. 45

at arm pit and very tight; tightness of sling pressing against left wrist; body leaning back slightly; right thumb along stock.

Kneeling positions. 1.

Fig. 44. Notice right knee pointing to right flank; left elbow resting on left knee, point of elbow well over knee; right heel supporting body; body bent forward; thumb along stock; cheek

against stock; sling as in Fig. 43.



FIG. 46



FIG. 47

2. Fig. 45. Notice right foot on which soldier is sitting; note position of left elbow; left hand well forward near upper sling swivel; right thumb along stock; body bent forward.

This position is excellent, if your build will enable you to take it.

Sitting positions. 1. Fig. 46. Note how head is bent well forward and right thumb held along stock; left hand well forward; heels dug into ground; body bent well forward; arm through loop of sling; note elbows.

2. Fig. 47. Same as Fig. 46, except position of feet and legs. Study carefully position of head, hands and elbows.

3. Fig. 48. *Rapid fire.* Keep piece at shoulder while ejecting the shells, raising head when bolt is pulled back, and keeping rifle and elbows in place.



FIG. 48

4. Fig. 49. Note general position of body and grip of piece, which show firmness and solidity.



FIG. 49

Study this picture carefully.

(Note incorrect position of thumb of right hand, which should be along stock and not across it.)

Prone positions. 1. Fig. 50. *Placing piece to shoulder.* Left hand well forward, piece resting on flat



FIG. 50.

of hand and not on fingers; front of body raised and turned to left; left elbow well under rifle; butt of stock grasped in right hand and placed in hollow of shoulder.

2. Fig. 51. Note excellent position of left hand. and also how left elbow is well under rifle.

*Right view**Left view***FIG. 51**

Note excellent position of legs.

3. Fig. 52. Note angle of rifle with body,—rifle well inclined to left.



Note also good position of legs and feet.

4. Fig. 53. *Rapid fire.* Keep piece at shoulder while ejecting the shells in rapid fire.

**FIG. 52**



FIG. 53

Sandbag rest. In the sandbag rest some men rest the piece directly on the sandbag as shown in Fig. 54.



FIG. 54

Difficulty of this position of piece on sandbag is in getting uniformity. The positions of feet, hands, legs, and head are very good. Study them carefully.

Others rest the piece on the hand, which rests on the sandbag, as in Fig. 55.



FIG. 55

Advantage of this position of piece is that it is suited to giving uniformity of hold. Note incorrect position of left foot, which should be same as right foot.

The secret of success in shooting with the sandbag rests is uniform holding,—that is, holding the piece the

same way each time,—and the position with the hand on the bag, as in Fig. 55, is the one best suited to getting this result.

DEFLECTION AND ELEVATION CORRECTION DRILLS (SIGHT-SETTING DRILLS)

Sight Correction. You may find when firing at a target that the first shot has missed the bull's-eye or figure. Now, one of two things may be done in order to cause the second shot to hit the bull's-eye or figure: (1) The point of aim may be changed, or (2) the sights may be moved and the same point as before aimed at.

In order to do accurate shooting it is necessary to have a well-defined mark at which to aim; consequently, except for very slight corrections, the method of moving the sights, involving changes in elevation and windage, is the one to be used.

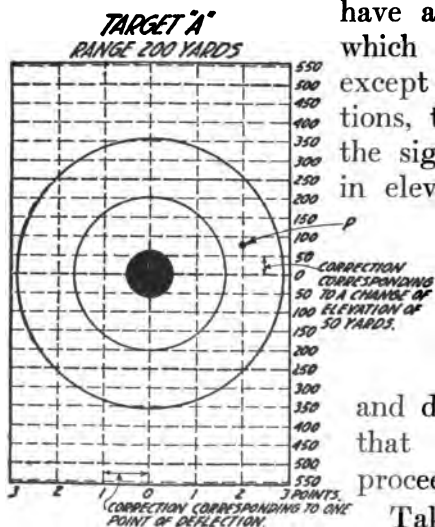


FIG. 56

Exercises. In order to give the soldier practice in making corrections in elevation and deflection (windage),—that is, in sight-setting,—proceed as follows:

Take an "A" target and rule it off with red vertical lines to represent range and black or blue horizontal lines to represent windage deviations, as in Fig. 56.

Tell the men to set their sights (either peep or open) for 200 yards, no windage. Examine the sights (assisted by the lieutenants, noncommissioned officers and expert riflemen).

Then say, for example, "You have fired a shot at 200 yards with your sights set as you now have them. The shot was marked here (pointing to 'P,' Fig. 56). Change your sights so as to move the next shot into the bull's-eye,—considering that you take the same hold as you did the last time."

(Note. In this case the sight should be

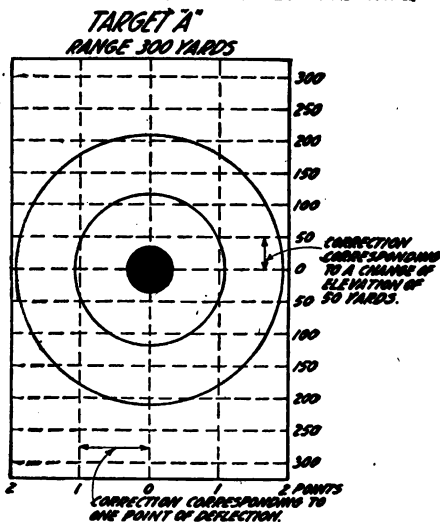


FIG. 57

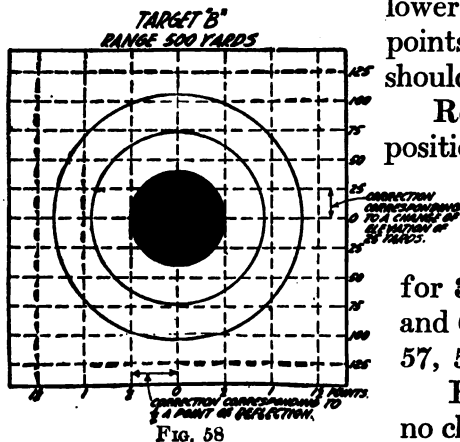


FIG. 58

lowered 75 yards and 2 points of left windage should be taken.)

Repeat with different positions for "P" until the men all understand the method and the reasons. Do same for 300 yards, 500 yards, and 600 yards. See Figs. 57, 58 and 59.

Explain that in firing no change in sights should

be made until the man is sure that his hold was good, and then change without hesitancy.

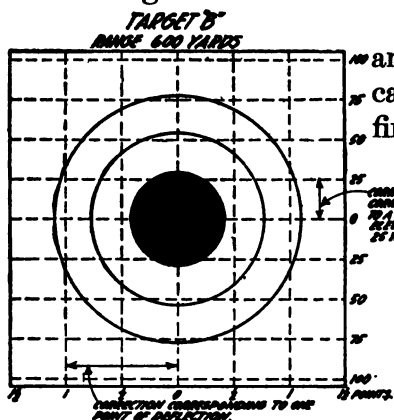


FIG. 59

The correct use of sights and their proper adjustment can thus be taught without firing a shot. This exercise will save much time and work on the range.

Elevation. As previously explained, raising the rear sight increases the range of the bullet and lowering it decreases the range.

The method of setting the rear sight for different distances was explained on page 221.

The amount of change which a given amount of elevation will cause in the point struck varies with the range and with the rifle and with the ammunition used.

For example, generally and approximately, in order, at a range of 500 yards, to change the point struck 1 foot, the rear sight must be changed 48 yards, while to change the point struck 1 foot at 1000 yards it must be changed 12 yards. That is to say, if you fired a shot at 300 yards, and then with the same aim, hold and other conditions as before, you *raised* your rear sight 48 yards, the next shot would strike the target 1 foot *above* the first one, and if you *lowered* the rear sight 48 yards, the bullet would then strike the target 1 foot *below* the first one. If firing at 1000 yards, *raising* the rear sight 12 yards would cause the bullet to strike the target 1 foot

higher and *lowering* the rear sight 12 yards would cause it to strike 1 foot *lower*.

The following table gives the approximate changes in the rear sight to move the point struck 1 foot at ranges from 100 to 1000 yards:

Range	Correction in elevation necessary to change the point struck 1 foot
100	415
200	185
300	105
400	70
500	48
600	35
700	25
800	20
900	15
1,000	12

The score-books issued by the Ordnance Department contain elevation charts and all you have to do is to consult the chart of your score-book in order to get the amount of elevation necessary at any particular range in order to raise or lower your shots any desired distance.

Deflection (windage). Corrections in the deflection (side movement) of the bullet are made by means of the windage screw that moves the movable base, each division of the graduations on the rear end of the movable base being called a "point of windage."

One point of windage moves the point struck 4 inches for each 100 yards of range.

That is to say, at 100 yards, 1 point of windage moves the point struck 4 inches; at 200 yards, 8 inches (2×4); at 300 yards, 12 inches (3×4), etc

Consequently, if at 100 yards the wind were carrying your bullets 8 inches to the side, you would take two points of windage to get on the bull's-eye, and if the wind were carrying your bullets 20 inches to the side, you would take 5 points of windage, irrespective of the rate at which the wind was blowing.

Again, if at 200 yards the wind were carrying your bullets 8 inches to the side, you would take 1 point of windage, and if it were carrying your bullets 20 inches to the side, you would take $2\frac{1}{2}$ points, irrespective of the rate at which the wind was blowing.

In using the wind gauge remember *windage is always taken in the direction from which the wind is coming (into the wind) and the bullet moves in the same direction that the rear sight moves,—that is, if the wind is coming from the right, you take right windage and the bullet will strike to the right. Likewise if you move the rear sight to the left (take left windage), the bullet will strike to the left.*

Designation of winds. Winds are designated as “12 o'clock,” “1 o'clock,” “2 o'clock,” etc., winds, depending on the direction *from* which they come.

Imagine the firing point to be in the middle of the face of a clock and the target to be at 12 o'clock; 3 o'clock will be on your right, 9 o'clock on your left, 6 o'clock in your rear and 12 in your front.

A wind blowing *from* your right to your left is called a 3 o'clock wind; one blowing *from* your rear is called a

6 o'clock wind; one from your front, 12 o'clock wind, etc.

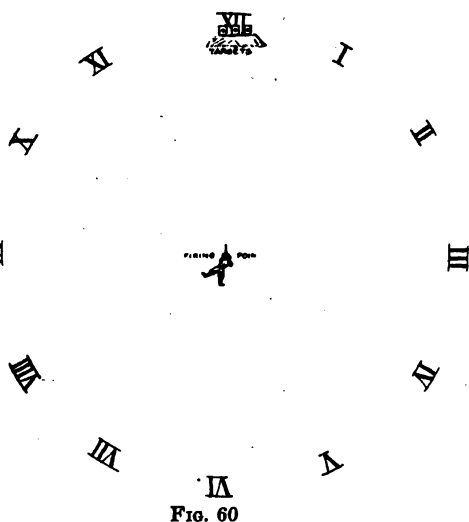
The score books issued by the Ordnance Department have windage charts that have been carefully worked out and all you have to do is this: Estimate the force of the wind in miles per hour, and determine the direction from which it comes (whether a 9 o'clock wind, a 2 o'clock wind, etc.). Then look at the windage chart and see just how much windage you must take.

The simplest and best rule for the beginner is for him to make his estimate and then ask an experienced shot what windage to use, checking this up with what he found on the windage chart. In this way he soon learns to estimate for himself.

Practice estimating the wind. Ask a man who has been making 5's and 4's what windage *he* used and check up with your own estimate.

You can find out the direction of the wind by watching smoke, grass or the limbs of trees.

Throw up some small straws and watch which way they are blown, or wet your finger and hold it up. The wind cools the side it strikes.



A 12 o'clock wind slows up the bullet and a 6 o'clock wind helps it along,—so, in the first case you would need more elevation and in the second less elevation.

Adjusting the sights. Although our rifles are made with the greatest possible care, the graduations on the rear sight will be found correct for but a comparatively few rifles. Some shoot high, others low; some to the right, others to the left, and so on.

Determine what corrections, if any, are necessary for your rifle at the different ranges and record them in your score-book. A rifle that needs no correction is said to "shoot on the mark."

The correction necessary for each particular rifle at any range is found by shooting it a few times at that range, and is constant with the same ammunition and when firing under the same conditions.

The zero of a rifle. As previously explained, the twist of the bullet given by the rifling of the barrel causes the bullet to move to right, which movement, called "the drift," is compensated by having the slot in the rear sight for the drift slide, slope to the left. However, in some rifles the compensation is too great and in others it is not enough.

That reading of the wind gauge necessary to overcome the drift of a rifle at a particular range is called the "zero" of that rifle for that range, and all allowances for wind should be calculated from this reading.

The "zero" of a rifle is found by shooting it on a perfectly calm day.

Front sight cover. There is no uniformity of practice in the service regarding the use of the front sight cover in firing,—some use it, while others do not.

The use of the front sight cover possesses no disadvantages, while it does prevent the black from being rubbed off and also lessens the effect of light changes. Because of this and also because the front sight cover would be used habitually in battle, its use is recommended in all firing.

Gallery practice. After the soldier has been thoroughly instructed in sighting, and in the position, aiming, deflection, and elevation correction drills, he is exercised in firing at short ranges (50 and 75 feet) with the gallery practice rifle (.22 caliber).

Notwithstanding the value of the position and aiming drills, it is impossible to keep up the soldier's interest if these exercises are unduly prolonged. By gallery practice, however, the interest is easily maintained and further progress, especially in teaching the trigger squeeze, is made. Many of the external influences, which on the range affect the firing, being absent, the soldier is not puzzled by results for which, at this stage of his education, he could not account were he advanced to firing with full charges. Furthermore, as there is no recoil to induce nervousness or flinching, the soldier soon finds that he can make good scores, and this success is the surest stimulus to interest.

Not only to the beginner is gallery practice of value; to the good shot it is a means of keeping, to a certain extent, in practice, and practice in shooting, as much as in anything else, is essential. Since it can be carried on throughout the year, gallery practice is of much value in fixing in the men the *habit of aimed fire*, than which nothing in his training is of more importance.

Procedure in rapid fire. The soldier should be thoroughly drilled in the mechanism of rapid fire, and instructed in the procedure to be followed on the range and in the regulations governing same, which are as follows:

At 200 yards there will be but one man firing at each target. The officer in charge of the line will command "Load." The magazine will be filled, the piece loaded with one cartridge therefrom, and the safety lock turned to "Safe." When all is ready in the pit the targets to be fired upon will be drawn fully down (the rear targets being blank or targets of another class than those being fired upon), and a red flag hoisted at the center target. When the red flag is displayed, the officer in charge of the firing line will command "Ready," when the safety lock will be turned to the ready and the position of "Ready" standing assumed, with the sling, if used, on the arm. The officer in charge of the firing line will then call so that all may hear, "Ready on the right; ready on the left." When the officer in charge calls out "Ready on the right," etc., anyone who is not ready must call out, "Not ready on target —." If any soldier fails to so call, it will be assumed that he is ready, and if he fails to fire when the target appears he will be given a total miss for that score.

The firing line being ready, the pit is signaled or telephoned, "Ready on the firing line." When this signal is received in the pit, the red flag is waved and lowered and five seconds thereafter the targets appear, remaining in sight one minute and then disappear. The soldier, without coming to the "Order," takes the kneeling or sitting position as soon as any part of the target

appears, begins to fire and attempts to fire 10 shots, re-loading with a full clip which is taken from the belt, and continues to fire until 10 shots are fired or until the target disappears.

Each unfired cartridge counts a miss.

In case of a defective cartridge or a disabled piece, or when more than 10 hits are made on a target, the practice is repeated.

At 300 yards the procedure is the same, except that the soldier assumes the prone position as soon as any part of the target appears, the time limit being 1 minute and 10 seconds.

At 500 yards the procedure is the same, except that the soldier is in the prone position, with the piece at the shoulder, before the target appears, the time limit being 1 minute and 20 seconds.

At all ranges, in rapid fire, firing is from a full clip, and the second clip must be loaded from the belt. In case a clip jams or breaks, cartridges may be loaded singly.

At the expiration of the time limit, the target is pulled down and marked, all hits being given their proper value. In case of more than 10 hits on a target, the target will not be marked but the firing line will be notified and the firing on that target repeated. In case a soldier fires on the wrong target, only such shots as he may have fired on his own target will be counted on his score. He will be given misses for the remainder of his score.

In firing rapid fire, if more than one target is used, the order of men at the firing point will fire together,

one man at each target, all targets being fired upon at one time.

The battle sight is used at all ranges in rapid fire.

Estimating distance. Ability to estimate distances correctly is an important part of a soldier's education.

While it is true that fire on the battlefield will usually be by groups and the ranges will be given by officers, the battlefield is reached only after a long series of experiences in scouting, patrolling, and outpost duty, in which the soldier is frequently placed in positions where it is necessary that he shall determine for himself the range to be used in order that his fire may be effective.

There are different methods of estimating the range (for example, by sound, trial shots, range-finding instruments, etc.), but the only ones that the average soldier need know are those of estimating distance by the eye and by trial shots.

To estimate distance by the eye with accuracy, it is necessary to be familiar with the appearance, as to length, of a unit of measure which can be compared mentally with the distance which is to be estimated. The most convenient unit of length is 100 yards. To impress upon the soldier the extent of a stretch of 100 yards two posts 100 yards apart, with short stakes between to mark each 25 yards, should be placed near the barracks, or on the drill ground, and the soldier required to pace off the marked distance several times, counting his steps. He will thus learn how many of his steps make 100 yards and will become familiar with the appearance of the whole distance and of its fractional parts.

Next a distance of more than 100 yards will be shown him and he will be required to compare this dis-

tance with the 100-yard unit and to estimate it. Having made his estimate, he will be required to verify its accuracy by pacing the distance.

A few minutes each day should be spent in this practice, the soldier often being required to make his estimate by raising his rear-sight leaf and showing it to the instructor. After the first drills the soldier should be required to pace the distance only when the estimate is unusually inaccurate.

The soldier should be taught that, in judging the distance from the enemy, his estimate may be corrected by a careful observation of the clearness with which details of dress, the movements of limbs or of the files in a line may be seen. In order to derive the benefit of this method, the soldier will be required to observe closely all the details noted above in single men or squads of men posted at varying distances, which will be measured and announced.

Although the standing and kneeling silhouettes used in field practice afford good objects upon which to estimate distances, the instructor should make frequent use of living figures and natural objects, as this is the class of targets from which the soldier will be compelled to estimate his range in active service.

Methods of estimating long distances by the eye.
The following methods are found useful:

(a) The soldier may decide that the object cannot be more than a certain distance away nor less than a certain distance; his estimates must be kept within the closest possible limits and the mean of the two taken as the range.

(b) The soldier selects a point which he considers the middle point of the whole distance, estimates this half distance and doubles it, or he similarly divides the distance into a certain number of lengths which are familiar to him.

(c) The soldier estimates the distance along a parallel line, as a road on one side, having on it well-defined objects.

(d) The soldier takes the mean of several estimates made by different persons. This method is not applicable to instruction.

Appearance of objects: How modified by varying conditions of light; difference of level, etc. During instruction the men should be taught the effect of varying conditions of light and terrain upon the apparent distance of an object.

Objects seem nearer—

(a) When the object is in a bright light.

(b) When the color of the object contrasts sharply with the color of the background.

(c) When looking over water, snow, or a uniform surface like a wheat field.

(d) When looking from a height downward.

(e) In the clear atmosphere of high altitudes.

Objects seem more distant—

(a) When looking over a depression in the ground.

(b) When there is a poor light or a fog.

(c) When only a small part of the object can be seen.

(d) When looking from low ground upward toward higher ground.

The recoil. The recoil, or the "kick," of the rifle is due to the explosion of the powder. The powder is changed into a gas and this gas needs more room than the cartridge gives it. Something must give way.

The pressure of the powder is equal in every direction. The walls of the chamber prevent motion sideways,—so that all motion is in the direction of the length of the barrel. The force used in sending the bullet forward is exactly the same as that which sends the rifle backwards. The rifle is much heavier than the bullet,—about 425 times as heavy—and moves correspondingly slower. If they were of equal weight, they would move with the same speed.

The rifle, if held loosely, will move against the shoulder quickly and will give a hard blow. If it is pressed firmly against the shoulder it can't get a start and the recoil becomes a push instead of a kick. Therefore, to avoid injury, *hold the piece pressed firmly against the shoulder*, and wear a pad on the shoulder and on the elbow.

Flinching. Don't flinch. Don't be afraid of your rifle. Flinching is due to fear. Don't be a coward.

Keep your eye open when firing. This will do more than anything else to prevent flinching. Also, wear a pad on your shoulder and on each elbow; press the butt hard against your shoulder and you cannot be hurt.

Practice "calling your shots,"—that is, announcing where your rifle was aimed at the moment of discharge. You will have to keep your eye open to do this, and it will thereby help you to overcome flinching.

A flincher must cure himself. Try squeezing the trigger very slowly and letting the rifle go off without knowing just when it does. If all else fails, try placing your thumb back of trigger and discharging piece by pinching slowly.

Padding. Pad the right shoulder and both elbows of your shirt, with what the tailors call "wadding." Get the padding well up on the shoulder and well out on the arm. Take the prone position and see just exactly where padding is needed.

Have this done before firing your first shot. Padding often saves the beginner from flinching.



FIG. 61

Calling your shots. Get in the habit of calling your shots,—that is, announcing where your rifle was aimed at the instant it was discharged. If the instructor is present, call your shots so that he can hear you; otherwise call them to yourself either in a low tone or mentally.

Shots are described and called as follows:

Imagine the target to be the face of a clock. If your rifle were aimed at the point ● where you fired, you would call, "4 at 5 o'clock" ("4" meaning the value of the hit, and "5 o'clock" indicating its position), or you would say, "A 4, low and to the right," but the clock system is the better.

The coach,—the officer or noncommissioned officer who advises you and who corrects your errors,—wants to hear you call your shots. If, for example, you call a 4 at 6 o'clock and you get a 2 at 9 o'clock, assuming you

are calling correctly, he knows that either your sights are improperly set, you are committing some error, or your rifle is a poor one. He lets you shoot again; you call 3 at 3 o'clock, but get a 2 at 8 o'clock. He sees that something is radically wrong, so he tries your rifle. Generally the rifle is not at fault; so the coach begins to study the case with the view of discovering the trouble. He has been looking at you—

1. To see if you have a good position and to see if the butt is properly placed against the shoulder.

2. To observe how your body moves after the rifle is fired.

3. To see if you strike yourself on the nose with your thumb or strike your cheek with your finger nails, or bruise the third joint of your middle finger against the trigger guard.

4. To see if the piece is canted.

5. To observe if you are breathing properly,—that is, holding your breath when you squeeze the trigger.

6. To see if you flinch.

Scorebook. Use your scorebook and study it carefully. The Bull's-eye Scorebook and the Marine Scorebook are both excellent. Some riflemen prefer one while others prefer the other. Follow the instructions of the scorebook issued you and you will qualify as marksman or better.

While waiting to take your position on the firing line, enter in your scorebook, the date, hour, place, wind, light, etc., just as explained in the scorebook. Be sure to do this; then when you come to fire at the same range with the same rifle on another day, and conditions are the same, you can start right in making 5's and 4's in-

stead of 2's and 0's. In other words, you will not have to feel around for the bull's-eye. You will know, for instance, how much windage you had the last time and what was the velocity of the wind. If the wind is not so strong this time, you will take less windage, and so on. In this way you will save time and loss of points in searching for the correct sight-setting.

Effect of heat and cold. Heat causes shots to strike high, and cold causes them to strike low.

Therefore, if you shot on a warm day and made 5's, and recorded temperature and other conditions in your scorebook, you would know on looking at your score sheets that you should raise your elevation, if you were firing on a cold day.

Effect of moisture. Dampness causes shots to strike high and dryness causes them to strike low. Therefore, on damp days take lower elevations than on dry days.

Effect of light. Light affects the aiming without the beginner knowing it. It does not, however, affect the travel of the bullet.

A dark target causes a tendency to aim farther below the bull's-eye than if the target were bright. Therefore, use higher elevations with dark targets. As it gets darker, higher elevations should be used.

If you *always aim carefully and correctly* the light will have little effect on your aiming,—that is, if your eyesight is good.

If you are shooting in a dull light and a bright sun comes out, say on your right, there is a tendency to move the front sight to the opposite (left) side of the rear sight notch, since the near (right) edge is shaded and obscured

somewhat. Therefore $\frac{1}{4}$ to $\frac{1}{2}$ windage into the sun (right in this case) should be taken to overcome this.

In using battle sight, hold higher for a bright light.

We also raise our sights if a strong sun comes out. Therefore, we have this rule: *Move your rear sight into the sun, just as you do for a wind,—and raise your elevation.*

Mirage gives a wavering appearance to the target. It is heated air that is moving. It is sometimes called "heat waves."

With the wind between 2 and 14 miles an hour on clear, hot days the waves can be seen moving across the target.

When there is no wind or a light six o'clock wind, the waves go straight up, or "boil." *Never fire when the mirage is boiling,—wait for it to move from one side to the other and then take windage to correct for it.*

Summary of temperature, light and moisture effects:

Raise elevation for—

Dull target
Shooting in the sun
Hot gun
Dirty gun
Cold day
Bright or shining sight
Cloudy day
12 o'clock wind

Lower elevation for—

Bright target
Target in sun
Cold gun
Clean gun
Hot day
Moist day
Full sights
6 o'clock wind

Firing with bayonet fixed. In firing with bayonet fixed usually a lower point on the target will be struck, corresponding to a reduction of about 50 yards in the range.

Finding the target. If you make a miss and you do not know where the bullet went, although you are sure you aimed correctly and your hold was good, you should—

1. See if you have set your windage into the wind. Sometimes men take left windage when they should have right.

2. See if your sights are at the proper elevation.

3. See whether the set screw which clamps the slide has loosened up and the slide slipped down or up.

4. Be sure that you used the correct notch.

5. Lower your elevation 50 yards if you are firing at 800 and 1000 yards. If at 500 or 600 lower 100 yards. Fire again and repeat with another reduction of range. If this does not find the target, add to the original elevation. If your sights are otherwise correctly set, you should find the target before a fourth shot is necessary.

Coaching. While any amount of coaching is permitted in the instruction practice, coaching of any nature whatsoever is strictly prohibited in record practice.

In record practice, after a soldier has taken his place at the firing point no one must attempt to render him any assistance whatever. (Par. 96, S. A. F. M.) He is not to talk to anyone about anything. (Author)

Firing in pairs. It is customary for two men to fire alternately at each firing point.

Use of rests. In known distance practice no rest except the authorized sandbag at 600 yards slow fire may be used.

However, in combat firing such rests as are available will be permitted.

Dress and equipment. In all classes of firing the service uniform will be worn. The coat may be omitted when authorized by the post commander.

In all known distance practice the soldier will be equipped with rifle, cartridge belt, and cartridge belt suspenders. When firing the cartridge belt suspender may be slipped from one shoulder if desired. (Par. 94, S. A. F. M.)

THE TARGET RANGE

Noncommissioned officer in charge of pit. A noncommissioned officer detailed to look after the arrangements at the butts.

The parapet. The mound of earth which protects the markers who are in the pit pasting the shot holes and indicating the value.

The pit. The space in which the targets are placed. It is a ditch 10 feet deep and 10 to 12 feet wide, of various lengths, depending upon the number of targets.

The butts. The pit, parapet and backstop, which is behind the targets, are called "The Butts."

The firing point. The line or spot on which the man is placed when firing.

The range house. A house built behind or near the butts, and in which target material is kept, targets are put together, pasted, etc.

The range officer. The officer charged with the management of the range.

Disks. The value of the shots are indicated from the pit with different colored disks that are fixed on the end of long handles.

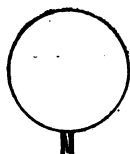


FIG. 65

A white disk indicates a bull's-eye (5).

A red disk indicates a center (4).

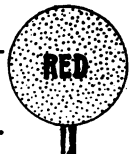


FIG. 66

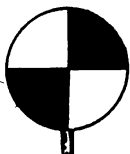


FIG. 67

A black and white disk indicates an inner (3).

A black disk indicates an outer (2).



FIG. 68

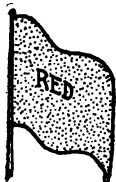


FIG. 69

A red flag indicates a miss.

A red and white flag indicates a ricochet (rick-o-shay), and means that the bullet struck the parapet and then glanced off and struck the target. The ricochet flag is shown with a disk of the value of the hit.



FIG. 70

In practice, in the absence of the prescribed ricochet flag with white field and red center, a white and red flag are displayed.

A ricochet counts just as much as a clean hit.

A shot which cuts the edge of the bull's-eye is a 5; a shot which cuts any ring has the value of the space inside the ring.

Spotters. Spotters are small disks of tin or cardboard that are fastened on a peg which is put into the shot hole to indicate its position to those at the firing point. With a pair of field glasses they can be seen distinctly from the firing point and thus the exact loca-

tion of the hit known. White spotters are used for 5's and black spotters for all other hits.

Targets. There are four targets used, and they are designated as "A," "B," "C," and "D" targets.

Target A is used for 200 and 300 yards, slow fire.

Target B is used for 500 and 600 yards, slow fire.

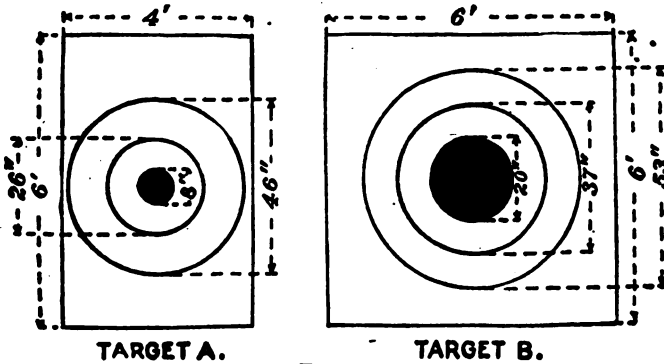


FIG. 62

Target C is used for 800 and 1000 yards, slow fire.

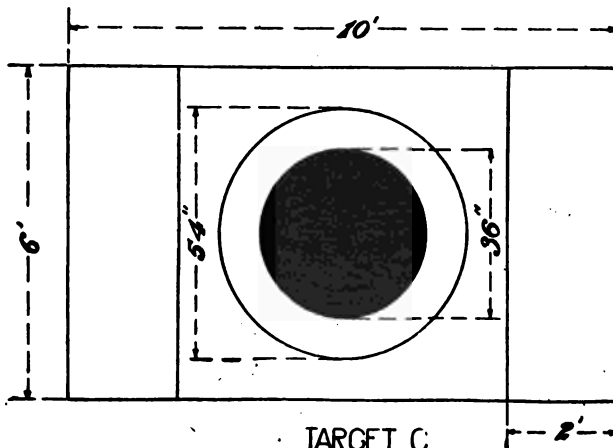
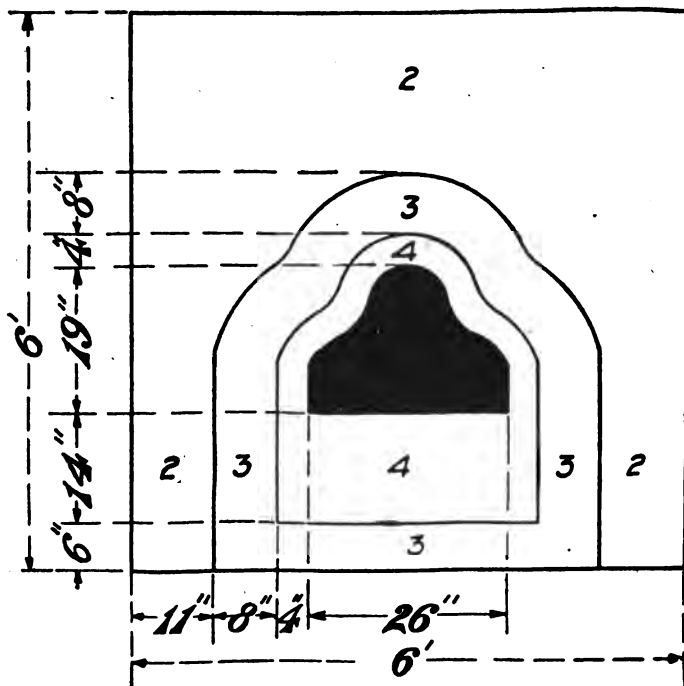


FIG. 63

Target D is used for 200, 300 and 500 yards, rapid fire.



TARGET D

FIG. 64

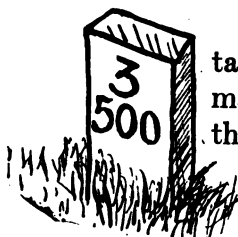


FIG. 71

Firing points. On well conducted target ranges the firing points are marked by stakes, Fig. 71, which means that this stake marks the firing point for the No. 3 target and the range is / 500 yards,—that is, the target is 500 yards away from this stake.

Each target is numbered; the number being down low on the parapet or up on the backstop, above the top of the target.



FIG. 72

Each man should be sure to fire on his own target. A bull's-eye on the wrong target gets a zero on your score sheet. One shot wasted in this way may mean the loss of expert qualification,—or two dollars a month for the term of your enlistment,—an expensive piece of carelessness.

Before you fire *glance up and see that you are on your own target.*

Marking. One of the important duties on the target range is that of *marking*. The First Sergeant details a certain number of men for “pit” detail,—usually two per target. These men are marched to the pit to be there about 20 minutes before firing is to commence.

They assist the noncommissioned officer in charge of the pit by getting the targets ready and in other ways.

Before firing starts the markers go to the targets to which they are assigned and when the firing begins they watch for the hole made by the bullet.

A little practice enables a man to tell whether his target was fired on, since the "crack" of the bullet going over your head sounds differently from the "crack" of the one passing to one side.

Just as soon as you know your target was fired on, either by sound or seeing the hole, pull it down and mark the raised target **ACCURATELY**. Place the center of the disk over the shot hole, and hold it there for a moment; then lower it.

Don't indicate where a miss went unless you are **ABSOLUTELY POSITIVE** about it. If you have to guess it, don't do it,—let the firer guess,—he will know he is guessing, but he does not think you are and he will go by what you mark. Suppose you are wrong,—and half the time you are, when guessing,—imagine the effect it will have on the firer. He will keep getting further away from the target.

The golden rule of the target range is: *Mark for others as you would have others mark for you.*

Be honest, careful and quick about your marking and your marking will be good.

Don't mark a miss until you have gone over the target carefully. Look in the rings and in the numbers indicating the value of hits. Examine edges of the frame carefully. Then if you are sure, wave the red flag.

Danger signals. When the target is in place and not in use, *always* display the red signal flag in front of

it, and be sure to place the flag so that it will be well above the parapet.

Half-masting the targets. If during the firing word is received that firing on such and such a target has ceased, the target in question is at once "half-masted,"—that is, brought about half-way down,—and the red flag displayed in front of it.

POINTS TO BE REMEMBERED

Before Firing

1. Blacken the front and rear sights. Smoke from a small piece of burning camphor gives the best results. Be sure to clean off all oil from the sights before blackening them, thereby insuring a uniform, velvety, dry black.

2. Clean the bore with dry rags and then with a rag saturated with gasoline, so as to remove all oil, which is liable to make your shots go wild.

3. See that there is no oil in the well of the bolt, as some of it may fly into your eye when the piece is discharged.

4. Having blackened your sight and cleaned your rifle, you should, while waiting for your name to be called, spend your time in position and aiming exercises, aiming at the target or other objects on or near the range. This practice previous to firing will prevent nervousness and will have a marked effect on your score. Also, study the wind, estimating its direction and velocity. Check up your conclusions by asking the more experienced shots in the company.

5. Watch the expert shots while they are on the firing line, and see what they are doing. Get all the

"dope" you can from them regarding windage, etc., before you take your place on the firing line.

6. When your name is called to replace a man on the firing line, get your score card at once from the First Sergeant and give it to the scorer of the target to which the First Sergeant has assigned you. Get your rifle and ammunition, examine your sights to see if they are still black and adjust them. Adjust your sling, get out your scorebook and pencil, and go up near your firing point. Enter in your scorebook the date, hour, wind, light, etc.

7. When the man you are to relieve leaves the firing point, take your place promptly. *Then load. Do not under any circumstances load before you are on the firing line.*

8. Don't waste your time while on the range. Keep your eyes open and learn. Know what you are to do, and do it. Don't make it necessary for your Company Commander, the First Sergeant, or someone else to get after you.

POINTS TO BE REMEMBERED

While Firing

1. Don't breathe while aiming. Take a deep breath; let some of it out, and then hold the remainder until after you have fired.

2. Get your sights aligned, and gradually *squeeze* your trigger. Keep your eye open when you discharge the piece. Continue your aim for a moment after discharge. This will enable you to call your shot. Call each shot.

3. Record each shot in your score book, and likewise record light, wind, time, etc., and follow directions therein.

4. Don't flinch. Wear pads and you won't be bruised by the kick.

5. Don't cant your piece. A little cant will throw you well out of the 4 ring.

6. Place the butt of your rifle in the hollow of your shoulder,—not on your arm. Hold tight, for if the piece is held loosely there will be a hard kick.

7. Place your right thumb *along* the stock and press your cheek against the stock.

8. Don't aim too long,—get your sights aligned quickly.

9. Except when your sight is being marked, don't look at the target between shots. Rest your eyes.

10. Don't rub your eyes. It will irritate them.

11. Immediately upon firing pull back the bolt to allow barrel to cool. Don't reload until the man shooting with you has fired. Then do so and aim, fire and eject empty shell.

12. Frequently examine your rear sight to see whether the slide has been jarred loose by the explosion and has slipped down.

13. Be sure you are using the right notch, and also be sure you are firing on the right target. A "5" on another target counts "0" for you.

14. In case of misfire do not draw back the bolt immediately, as it may be a case of hang-fire and an explosion may result which may cause serious injury. In such case cock the piece by drawing back the cocking piece with the hand.

15. Do not leave your cartridges exposed to a hot sun. Keep them in your belt, which will also keep them clean. Cartridges that have been lying in a hot sun will fire high. This also applies to cartridges placed and kept in the chamber of a hot rifle a considerable time before firing. Never place the cartridge in the rifle until you are ready to fire it.

POINTS TO BE REMEMBERED

At All Times

1. Never let the firing pin down by hand on a cartridge in the chamber. If necessary to carry the piece cocked, with a cartridge in the chamber, turn the safety lock to the *right* as far as it will go, so that the word "*Safe*" is seen.

2. In manipulating the bolt always draw it back as far as it will go, thus making sure that the empty shell will be ejected and that when the bolt is shoved forward it will catch the top cartridge in the magazine.

3. Be sure always to have some oil in your oiler, and that the thong and brush when not in use are always in the oiler and thong case.

4. Keep the cover on the front sight habitually.

5. Never load your piece or carry cartridges in the magazine unless specifically ordered to do so.

6. Keep the cut-off turned "*Off*," except when actually using the magazine.

7. Carry your piece habitually with the safety lock at "*Safe*,"—that is to say, locked.

8. Use the sling in all shooting. It will improve your shooting.

9. Never put the muzzle of your piece on the ground. If you do, you will probably get dirt in it, and

if you should fire the rifle with dirt in the muzzle, the barrel will probably be seriously injured. Even if you don't fire the piece, in removing the dirt from the muzzle you may injure the muzzle and thus reduce the accuracy of the rifle.

10. Remember that to shoot well a man must be in good physical condition.

IN CONCLUSION

Practice, practice, PRACTICE. There is no royal road to good marksmanship,—it requires lots of constant, careful, hard and patient practice. This is the only way that the eye, the muscles of the body and the nervous system can be kept in that condition which is necessary for them to be in order to work in unison with one another and with the mind, a requisite without which good marksmanship is impossible.

It is said that the great pianist, Paderewski, practices on a dumb piano for hours every day in order to keep his fingers in perfect condition. So, too, it is necessary for the rifleman to train his muscles and keep them in proper condition.

If properly trained the muscles will not by an improper or convulsive movement pull the rifle off the target when the piece is fired. The muscles must be trained to hold the rifle steady.

The hand must be taught to **SQUEEZE** the trigger so that the aim will not be disturbed and the final pressure will be applied at the exact moment when the top of the front sight is seen to be properly directed on the target.

The eye must be trained to take the same amount of front sight each time and to be focused on the target when the piece is discharged.

But these things require *practice*, practice, **PRAC-TICE**.

So, take advantage of every opportunity to practice aiming and **SQUEEZING** the trigger. It is a common thing at competitions to see expert shots standing, kneeling, sitting, or lying on the ground practicing by the hour **SQUEEZING** the trigger and holding the rifle steady. They place a black disk on a wall 20 or 30 feet away and try to hold the rifle on it.

If expert shots find it necessary to do this, just think how much more necessary it is for beginners. Remember that they were beginners once. If you practice faithfully as they did, there is no reason why you cannot attend competitions and win medals, too.

Use some of your spare moments in practicing the position and aiming exercises.

Put a black paster up on the wall of your squad room and every day practice an hour or more holding on it,—that is, aiming at it and **SQUEEZING** the trigger. When standing around on the company parade, waiting for the company to fall in, practice some more. When on the target range waiting for your turn to shoot, get off to one side and practice holding on a target.

This practice, in addition to training the muscles and educating the eye, will also overcome nervousness.

Remember, in your practice *always to aim at some particular object*.

The Hollifield Target Practice Rod. The best instruction practice that can possibly be had in aiming and in squeezing the trigger is to be obtained with the Hollifield Target Practice Rod, a device which the author, as the result of experience, cannot recommend

How to Shoot

too highly. The following illustration shows the rod in use:

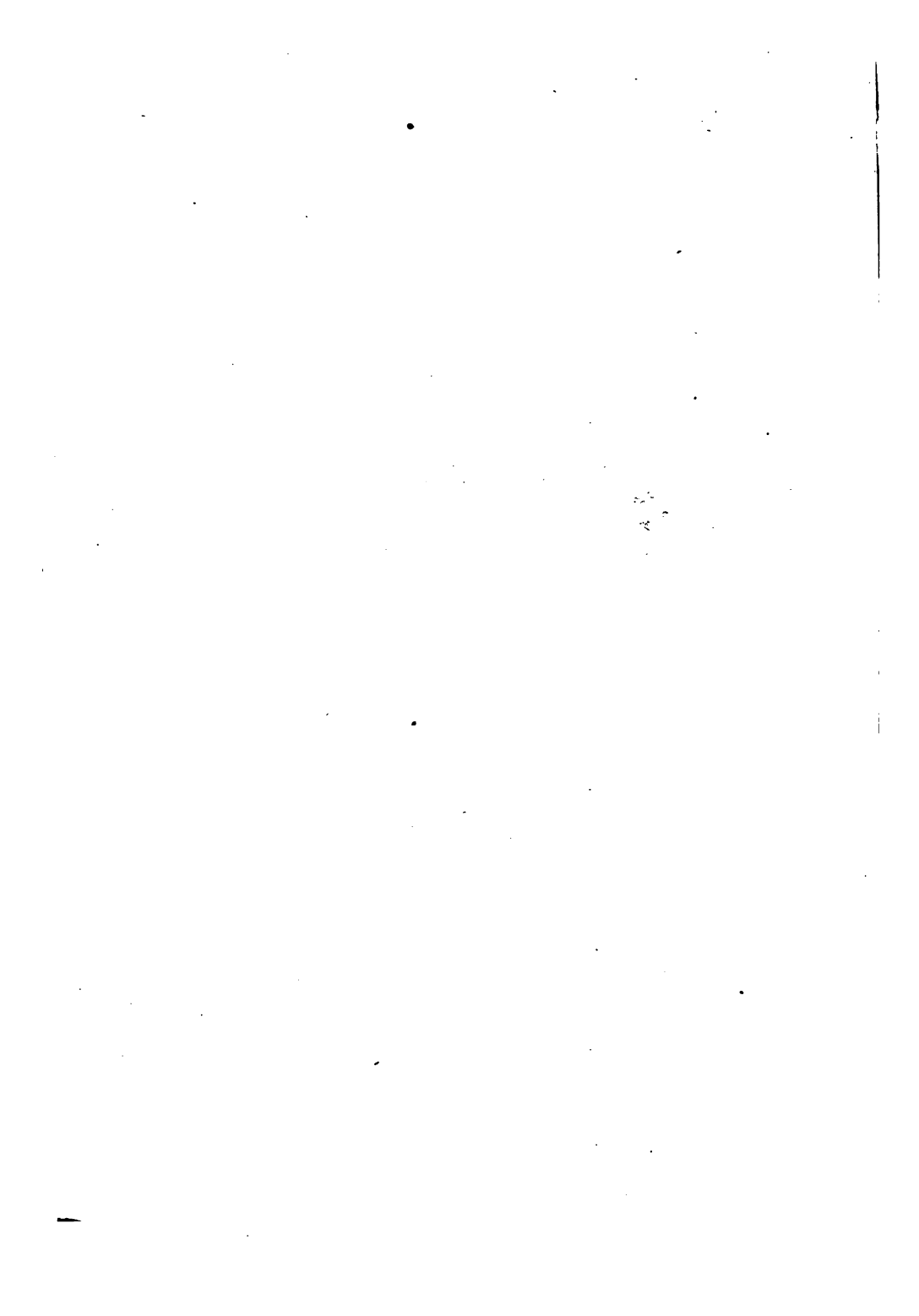


FIG. 73

It is really astonishing what results can be obtained from a persevering and painstaking use of the Hollifield rod, which possesses a certain "human interest" that dispels entirely the monotony and irksomeness of aimless snapping. The instructions for the use of the rod describe a simple and effective method of using the device also for elementary practice and instruction in windage and elevation.

The latest Hollifield rod is equipped with an excellent dummy cartridge feature, which enables practice in the mechanism of rapid fire, and instruction should be had with it in rapid fire as well as in slow fire. Men should be required to call their shots.

The Hollifield Target Practice Rod has been officially adopted by the United States Army and can be obtained upon requisition just like any other article of ordnance property. The National Guard of States can get it under Section 1661 R. S., or Section 17 of the Amended Militia Laws. Individuals can, of course, purchase it direct from the Hollifield Target Practice Co., Middletown, N. Y.



CHAPTER XIV

THE PRIVATE'S CAMPAIGN CREED

IN BATTLE

My battle orders are:—

1. Having once loaded my piece, I will, by inserting fresh clips when the magazine is exhausted, keep it loaded without further command until the command *unload* or *inspection arms* is given. (Par. 134, I. D. R.)

2. I will not straggle, nor will I under any circumstances skulk, but, at the command to advance, I will always do so *at once*.

3. In advancing by rushes, or any other way, I will always endeavor to be the first man to start the advance. I am aware of the fact that in advancing by rushes the last men to reach the new position are exposed to the enemy's fire that much longer, and, consequently, are more apt to get hit than the others.

4. I will not endeavor to carry any wounded to the rear. That is the business of the litter-bearers. My business is to remain on the firing line and help with my rifle.

5. I will not fail to change my sight when new ranges are announced, nor will I forget to change my sight when advancing by rushes, whether or not the new range is announced.

6. I will never lose an opportunity to replenish my ammunition supply from the belts of the dead and

wounded. The time may come before the fight is over when ammunition will be worth a hundred times its weight in gold.

7. I will use a rest for my rifle whenever I can. It will improve my shooting.

8. I will obey at once all the commands and orders of my squad leader, and my platoon leader.

9. In case of surprise, excitement or confusion, I will at once listen for the orders of my officers and non-commissioned officers, and I will obey them immediately and implicitly.

10. I will take advantage of cover, but, if by so doing, I cannot see the enemy, I will then get where I can see him; for, it is much more important that I should be able to see the enemy so as to shoot at him, than it is for me to conceal myself from his sight. I will always take special pains to avoid the sky-line (the tops of hills and ridges); for, a man on the sky-line looms up as a clear, distinct target.

11. When on the firing line, I will be on the lookout for signals and orders from my squad leaders; I will exercise proper care in setting my sights and delivering my fire; I will aim deliberately; I will observe the enemy carefully, increase my fire when the target is favorable and cease firing when the enemy disappears; I will not neglect a target because it is not very distinct; I will not waste my ammunition, but will be economical with it.

(Sharpshooters and expert riflemen.) I will be on the lookout for the enemy's officers and will fire at every one I see.

12. When firing on the firing line I will keep my eyes on the target, and will obey promptly all commands

received from my squad leader, who is the one to give me my orders when I am firing on the firing line.

13. When firing on the firing line I will **AT ONCE** suspend firing upon hearing a **LONG** blast of my company commander's whistle or my platoon leader's whistle.

14. With the exception of the **LONG** whistle blast given by the company commander or platoon leader, I will pay no attention to signals of anyone except to those of my squad leader.

15. I will use the ammunition in bandoleers first. I will keep thirty (30) rounds in the right pocket section of my belt as a reserve to be used only when ordered by an officer. (Par. 551, Infantry Drill Regulations.)

16. When reënforcing the firing line I will find out at once the range and target from the men already there.

17. I will at all times make every possible effort not to get separated from my squad, but should I unavoidably become separated, I will immediately try to rejoin it. Should I fail in this, I will then join the nearest squad and put myself under the orders of its leader. Should I not be able to do this, and thus find myself without a leader for the time being, I will not lose my head, but will go on fighting on my own hook, remembering that the only way for us to win the battle is for each and every man to **fight, fight, FIGHT** for all that he is worth. To give up fighting will only make it just that much easier for the enemy to kill me and my comrades.

18. In case my squad leader is killed or wounded or becomes separated from the squad, if I am the oldest soldier in the squad I will at once assume command of it, and will take the proper position of squad leader.

NIGHT OPERATIONS

My orders in night operations are:—

1. I will not talk or make other noise, but will preserve absolute silence. Nor will I smoke or strike matches, because the light might be seen by the enemy.

2. I will be constantly on the lookout for signals and orders from my officers and noncommissioned officers, and I will obey at once all signals and orders.

3. If ordered to fire, I will be sure to hold my piece parallel to the ground, so as not to shoot high.

4. Under no circumstances will I ever fire in a night movement unless ordered by a superior, or unless I am placed in a position where I must fire in order to give the alarm.

OUTPOST ORDERS

My orders as a sentry on outpost are:—

1. The number of my post (if any) is No....., of Outguard No..... Outguard No..... is on my right, and No....., on my left.

2. The support of this outguard is located..... (define location), and if compelled to fall back, I will retreat..... (state line of retreat).

3. (If any.) There are.....advance detachments in front of me, located as follows..... (give location), and.....friendly patrols are operating in my front.

4. Should any friendly patrol attempt to cross the outpost line near me without telling me who they are, where they are going, about how long they will be out and how they will return, I will halt them and get this information before allowing them to proceed.

5. The enemy is (or is supposed to be)..... (define location as accurately as possible), and if he approaches us, he will very likely do so by way of..... (state direction from which the enemy is expected).

6. In case the enemy approaches, I will..... (state fully and specifically what you would do).

7. I know the names of all the villages, streams and other prominent features in sight and also where the roads lead. The village over yonder (pointing) is.....; this road (pointing) leads to.....; that high mountain is called....., etc.

8. I will keep a constant watch to the front and flanks and will pay special attention to unusual or suspicious noises or occurrences.

9. If I see any indications of the enemy, I will at once notify the outguard commander. In case of great and immediate danger or in case of attack, I will give the alarm by firing my piece rapidly.

10. Officers, noncommissioned officers and detachments that I recognize as parts of the outposts, and officers that I know have authority to do so, will be allowed to pass in and out of the outpost line. I will detain all others and notify the commander of the outguard.

11. I will fire upon individuals or detachments who fail to halt, or, otherwise disobey me after a *second* warning, or sooner, if they attempt to attack or escape.

12. I will halt deserters approaching, order them to lay down their arms and notify the commander of the outguard. I will order deserters pursued by the enemy to drop their arms and will at once notify the commander of the outguard. Should deserters fail to lay down their arms after a *second* warning, I will fire upon them.

13. I will halt bearers of flags of truce, cause them to face about, and will notify the commander of the out-guard.

14. I will salute only when I address, or am addressed by officers.

15. In case of doubt as to what to do, I will call for the commander of the outguard.

16. At night I will allow persons to approach fairly close before challenging, and I will challenge in a low voice so as not to reveal my position to the enemy.

17. I will never fire at night unless I can clearly see the enemy and I am sure I can hit him, or unless it be absolutely necessary to fire in order to give the alarm.

ADVANCE AND REAR GUARDS

My orders when acting as connecting file on advance or rear guard duty, are:—

1. I will be on the constant lookout for signals, which I will always transmit at once.

2. I will always take distance from, and keep in sight of, the body in my rear.

3. When the column halts, if I am not already in a position where I can see both bodies between which I am acting as connecting file, I will, if possible, place myself in such position, and will keep on the constant lookout for signals from both bodies. Should I receive a signal from one body when I cannot see the other, I will at once run to a position from which I can see the other and repeat the signal.

4. If fired on from the front while acting as a point, I will act as follows:—

(a) If the country is broken and I know those behind me cannot see the enemy, I will at once drop

behind the best cover near me and will immediately return the fire, indicating where the enemy is to those behind me when they come up to where I am.

(b) If the country is open and I know that those behind me can see the enemy, I will at once drop back to the right and rear, or to the left and rear, depending upon circumstances, so as not to be in the way of the fire of those in rear, and as soon as I have cleared their front, I will drop behind the nearest cover and open fire on the enemy.

PATROLLING

My orders when patrolling are:—

I will take special pains to remain concealed as much as possible; for, when seeking information about the enemy, it is often almost as important not to be seen as it is to see.

MESSAGES

1. When I am given a verbal message by a non-commissioned officer to carry, I will always repeat the message to the noncommissioned officer before leaving, to see that I understand it, and, as I am leaving, I will go over the message several times in my own mind. If given a message by an officer, and not directed by him to repeat it, I will before leaving ask, for instance, "May I repeat the message so as to be sure that I understand it?", and, as I am leaving, I will go over the message several times in my own mind.

2. I will always conceal in my shoe or elsewhere any written message I may be carrying, and, if captured, will try to destroy the message the very first chance I get.

ON THE MARCH

My orders on the march are:—

1. I will fill my canteen before the march begins.
2. I will not leave ranks to get water or for any other purpose without permission of my company commander, and during halts I will not leave the immediate vicinity of the company without permission.
3. Should I wish to relieve myself when the company halts, I will do so as soon as the halt is made and not wait until it is nearly over.
4. I will at all times keep my proper place in column.
5. I will not nibble food while actually marching.
6. I will not sit on damp ground during halts.
7. I will not enter yards, orchards, or gardens, during halts, nor will I ever enter a house unless invited to do so by the occupants.
8. When the command is given to fall in after a halt, I will fall in promptly.

IN CAMP

My orders in camp are:—

1. Upon first reaching camp I will not leave camp until I find out from the First Sergeant what the orders are about the men leaving camp.
2. I will not introduce liquor into camp.
3. In camp and on the march I will take good care of my feet and look after my health according to the instruction received in garrison.
4. I will obey faithfully the instructions received from my company commander about camp sanitation.

GENERAL

1. In battle, in camp, on the march, and at all other times, I will comply faithfully with all the known wishes and desires of the company commander.

2. If I see I am going to be captured, I will, if possible, throw away the bolt of my rifle and should I have field glasses in my possession I will break the lenses.

3. Should I be taken prisoner, I will not, under any circumstances give any information about our troops, and should I be compelled to answer questions, I will give misleading answers. Nor will I talk with any of our men about our own troops, what we were doing when captured, etc., because the chances are the enemy or some of their spies will overhear my conversation. I will take advantage of the first opportunity to make my escape and get back to our troops with all the information that I can get about the enemy.

CHAPTER XV

SIGNALING

SIGNALS AND CODES

General Service Code. (International Morse Code)

A	.-	N	-.
B	-... .	O	---
C	-.-.	P	---.
D	-... .	Q	---.-
E	.	R	.-.
F	..-.	S	...
G	--.	T	-
H		U	..-
I	..	V	...-
J	.----	W	.-.-
K	-.-	X	-...-
L	.-... .	Y	-.--
M	--	Z	--... .

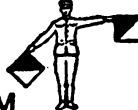
Numerals

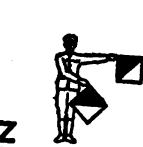
1	.-----	6	-... .
2	..---.	7	--... .
3	...--.	8	---... .
4	-. .	9	-----.
5		0	-----

Punctuation

Period	
Comma	..-.-.
Interrogation	..-... .

The Two-Arm Semaphore Code

ERROR  A 1	 F 6	NEGATIVE  K
 B 2	 G 7	PREPARATORY  L
 C 3	 H 8	 M
 D 4	 I 9	ANNULING  N
 E 5	 J 0	INTERROGATORY  O

AFFIRMATIVE  P	 U	 Z
 Q	 V	ATTENTION 
ACKNOWLEDGE  R	 W	INTERVAL 
 S	 X	NUMERALS 
 T	 Y	

The More Important Conventional Flag Signals

For communication between the firing line and the reserve or commander in rear. In transmission, their concealment from the enemy's view should be insured. In the absence of signal flags the headdress or other substitute may be used.

Letter of alphabet	If signaled from the rear to the firing line	If signaled from the firing line to the rear
A D F.....	Ammunition going forward	Ammunition required.
O C C.....	Charge (mandatory at all times) ..	Am about to charge if no instructions to the contrary.
O F.....	Cease firing	Cease firing.
D T.....	Double time or "rush"	Double time or "rush."
F.....	Commence firing	Commence firing.
F B.....	Fix bayonets	Fix bayonets.
F L.....	Artillery fire is causing us losses	Artillery fire is causing us losses.
G.....	Move forward	Preparing to move forward.
H H H.....	Halt	Halt.
K.....	Negative	Negative.
L T.....	Left	Left.
O.....	What is the (R N, etc.)? Interrogatory	What is the (R N, etc.)? Interrogatory.
(Ardois x semaphore only.)	What is the (R N, etc.)? Interrogatory	What is the (R N, etc.)? Interrogatory.
(All methods but ardois and semaphore.)		
P.....	Affirmative	Affirmative.
R.....	Acknowledgment	Acknowledgment.
R N.....	Range	Range.
R T.....	Right	Right.
S S S.....	Support going forward	Support needed.
S U F.....	Suspend firing	Suspend firing.
T.....	Target	Target.

WIGWAG

Signaling by flag, torch, hand lantern, or beam of searchlight (without shutter)¹

1. There is one position and there are three motions. The position is with flag or other appliance held vertically, the signaller facing directly toward the station with which it is desired to communicate. The first

¹ Extracts from Signal Book, United States Army.

motion (the dot) is to the right of the sender, and will embrace an arc of 90° , starting with the vertical and returning to it, and will be made in a plane at right angles to the line connecting the two stations. The second motion (the dash) is a similar motion to the left of the sender. The third motion (front) is downward directly in front of the sender and instantly returned upward to the first position. This is used to indicate a pause or conclusion.

2. The beam of the searchlight, though ordinarily used with the shutter like the heliograph, may be used for long-distance signaling, when no shutter is suitable or available, in a similar manner to the flag or torch, the first position being a vertical one. A movement of the beam 90° to the right of the sender indicates a dot, a similar movement to the left indicates a dash; the beam is lowered vertically for front.

3. To use the torch or hand lantern, a footlight must be employed as a point of reference to the motion. The lantern is more conveniently swung out upward to the right of the footlight for a dot, to the left for a dash, and raised vertically for front.

4. To call a station, make the call letter until acknowledged, at intervals giving the call or signal of the calling station. If the call letter of a station is unknown, wave flag until acknowledged. In using the searchlight without shutter throw the beam in a vertical position and move it through an arc of 180° in a plane at right angles to the line connecting the two stations until acknowledged. To acknowledge a call, signal "Acknowledgment (or) I understand (---- front)" followed by the call letter of the acknowledging station.

CHAPTER XVI
EXTRACTS AFFECTING PRIVATES FROM
ARMY REGULATIONS, UNIFORM
REGULATIONS, WAR DEPART-
MENT ORDERS, REVISED
STATUTES, AND RULES
OF LAND WAR-
FARE

ARMY REGULATIONS

(The numbers following the paragraphs are those of the Army Regulations.)

Obedience. All persons in the military service are required to obey strictly and to execute promptly the lawful orders of their superiors. (1)

Exercise of military authority. Military authority will be exercised with firmness, kindness and justice. Punishments must conform to law and follow offenses as promptly as circumstances will permit. (2)

Tyrannical conduct and abusive language. Superiors are forbidden to injure those under their authority by tyrannical or capricious conduct or by abusive language. While maintaining discipline and the thorough and prompt performance of military duty, all officers, in dealing with enlisted men, will bear in mind the absolute necessity of so treating them as to preserve their self-respect. Officers will keep in as close touch as possible with the men under their command and will strive to build up such relations of confidence and

sympathy as will assure the free approach of their men to them for counsel and assistance. This relationship may be gained and maintained without relaxation of the bonds of discipline and with great benefit to the service as a whole. (3)

Courtesy. Courtesy among military men is indispensable to discipline; respect to superiors will not be confined to obedience on duty, but will be extended on all occasions. (4)

Deliberations or discussions; efforts to influence legislation. Deliberations or discussions among military men conveying praise or censure, or any mark of approbation, towards others in the military service, and all publications relating to private or personal transactions between officers are prohibited. Efforts to influence legislation affecting the army, or to procure personal favor or consideration, should never be made, except through regular military channels; the adoption of any other method by any officer or enlisted man will be noted in the military record of those concerned. (5)

Furloughs. A furlough will not be granted a soldier about to be discharged, nor shall the number of men furloughed from any command exceed 5 per cent of the enlisted strength present therewith. (106)

Men on furlough not to leave U. S. without permission. An enlisted man on furlough will not leave the United States to go beyond the sea unless the furlough includes permission to do so. The limits prescribed will be stated in the furlough, and if exceeded it may be revoked and the soldier arrested. (109)

Men on furlough or absent without leave reporting without means to a station for transportation.

When an enlisted man who is absent on furlough or absent without leave from his station and is without means to return thereto reports at a station that is under the control of a department commander, such department commander is authorized to furnish the necessary transportation and subsistence for the return of the soldier to his proper station after satisfying himself that the soldier can be intrusted therewith, or in the case of absence without leave, to return him under guard if necessary. The company commander will charge the cost of such transportation and subsistence against the soldier's pay on the next pay roll. (110)

Commencement of furloughs granted men in foreign countries. Furloughs granted to enlisted men serving in Porto Rico, Hawaii, Guam, the Philippine Islands, Alaska, or at any station beyond the continental limits of the United States, for the purpose of returning thereto, will take effect on the dates they reach the United States, which will be indorsed on the furloughs by the transport quartermaster if travel is by United States transport; otherwise the certificate of the captain, pursuer, or other proper officer of commercial steamer upon which journey is made, as to date of arrival in home port will be indorsed thereon. The furloughs will direct the soldier to report for duty at the close of the last day thereof at the military post nearest the particular home port from which transports or commercial steamers usually sail for the islands or stations above referred to, and the commanding officers of these posts will assign such enlisted men to organizations under their command for the purpose of subsistence during the time they are detained at their posts, and they will be returned

to their proper stations by the first available transport, or commercial steamer if there are no United States transports sailing to destination. Commanding officers will cause notation to be made on the furloughs showing the dates when the men report at their posts and at the proper time will issue the necessary orders directing them to rejoin their stations, reciting therein the date of their arrival in the United States, date of reporting at post, and whether or not commutation of rations has been paid. A copy of the order will be furnished to the soldier and to the commanding officer concerned. The quartermaster of the transport, or proper officer of commercial steamer on which these enlisted men return, will indorse on such orders the dates during which they were subsisted aboard the transport or commercial steamer. The order will be retained by the enlisted man, who will deliver it to his commanding officer as evidence of his authority to be absent from his post during the time required for travel in rejoining the same. (111)

Change of station while on furlough. When the station of an enlisted man is changed while he is on furlough, he will, on joining his new station, be entitled to travel allowances for the excess of distance from the place of receipt of the order to the new station over the distance to his old station. A soldier who has returned to the station from which furloughed, his company having changed station during his absence, is entitled to transportation at the expense of the Government from the old to the new station of his company. (112)

Arms and payment while on furlough. Soldiers on furlough will not take with them their arms or ac-

couterments, and no payments will be made to them without authority from the War Department. (118)

Property lost or destroyed by deserters. When a soldier deserts, his company commander will at once ascertain whether any public property has been lost in consequence thereof, and if so, the value of same will be charged against the deserter on the next pay rolls. (116)

Clothing abandoned by deserters. Clothing abandoned by a deserter is turned over to the quartermaster. All other personal effects are sold by a council of administration and the proceeds deposited to the credit of the United States. In no case will the money or proceeds of the sale of the effects of a deserter be turned over to relatives. (117)

Reward for apprehension and delivery of deserters and escaped military prisoners. A reward of \$50 will be paid to any civil officer or civilian for the apprehension and delivery of a deserter, or a military prisoner. (121)

Expenses incurred by enlisted men sent in pursuit of deserters. When enlisted men are sent in pursuit of a deserter, the expenses necessarily connected therewith will be paid whether he be apprehended or not and same will be charged against the deserter. (122)

Reward or expenses paid for apprehending a deserter to be charged against the deserter. Rewards or expenses paid for apprehending a deserter, and the expenses incurred in transporting him from point of apprehension, delivery, or surrender to the station of his company or detachment, or to the place of his trial, including the cost of transportation of the guard, will be

set against his pay upon conviction of desertion by a court-martial, or upon his restoration to duty without trial. A soldier convicted by a court-martial of absence without leave will be charged with the expenses incurred in transporting him to the station of his company or detachment, or to the place of his trial, including the cost of transportation of the guard. *Except in the case of a soldier restored to duty at the United States Disciplinary Barracks or any branch thereof by the remission of his suspended sentence of dishonorable discharge or pursuant to section 1352, Revised Statutes, a soldier convicted by a court-martial of desertion or absence without leave or a deserter restored to duty without trial for desertion, who is sent from the point of apprehension, delivery, or surrender, to a place of confinement or trial other than the station of his company or detachment, and is later sent to the station of his company or detachment, will be charged with an amount equal to the cost of his own transportation and that of his guard, if any, from the point of apprehension, delivery, or surrender, to the station of his company or detachment. The cost of transportation to a station of a soldier restored to duty from suspended or executed dishonorable discharge at the United States Disciplinary Barracks or any branch thereof will be borne by the Government. The transportation and subsistence of witnesses will not be charged against a deserter. (127)*

Reward or expenses in case of acquittal of charge of desertion. If a soldier be brought to trial under a charge of desertion and acquitted, or convicted of absence without leave only, any amount paid as a reward for his arrest will not be stopped against his pay. (128)

Deserters not to draw pay while awaiting trial; to wear clothing worn when arrested. Deserters will be brought to trial with the least practicable delay. When awaiting trial they will receive no pay, nor will they be permitted to sign pay rolls, and will be required to wear the clothes worn at the time of arrest, unless it should be imperative to issue other clothing, when, as far as practicable, only deserters' or other unserviceable clothing will be issued. (129)

Restoration of deserter to duty. A deserter will not be restored to duty without trial except by authority competent to order his trial; such restoration, being ordered only in case the desertion is admitted, does not remove the charge of desertion or relieve the soldier from any of the forfeitures attached to that offense; he must make good the time lost by desertion, refund the reward and expenses paid for apprehension and delivery, and forfeit pay while absent. The same authority is competent to set aside a charge of desertion as having been erroneously made, and his order to this effect operates to remove the charge of desertion and all stoppages and forfeitures arising therefrom. (131)

Forfeiture of pay and allowances while absent without leave and making good time lost. An enlisted man who absents himself from his post or company without authority will forfeit all pay and allowances *thereafter accruing until the date of his return to military control*, and will be required to make good the time lost by such absence. The period of *such* absence will not be regarded as service in the computation of continuous-service pay under the laws existing prior to the act of Congress approved May 11, 1908, or for

retirement. No man will be reported a deserter until after the expiration of 10 days (should he remain away that length of time), unless the company commander has reason to believe that the absentee does not intend to return; but commanding officers will take steps to apprehend soldiers absent without leave as soon as the fact of that absence is reported. Should the soldier not return, or not be apprehended, within the time named, his desertion will date from the commencement of the unauthorized absence. An absence without leave of less than one day will not be noted upon the muster rolls. (132)

Retirement. When an enlisted man shall have served as such for 30 years, either in the Army, Navy or Marine Corps, or in all, he is eligible for retirement. Men so retired are entitled to transportation and subsistence to their home.

Length of war service with the Army in the field, or with the Navy or Marine Corps in (either as volunteer or regular) actual service in China, Cuba, the Philippines, the Island of Guam, Alaska, or Panama, or prior to April 23, 1904, in Porto Rico, will, for men enlisting prior to August 24, 1912, be doubled in computing the 30 years' service. (134)

Retired soldiers receive three-fourths pay at date of retirement and also \$6.25 per month as commutation for fuel and light and \$9.50 as commutation of clothing and rations. (Paymasters' Manual.)

Discharge from service. An enlisted man will not be discharged before the expiration of his term of service except—

1. By order of the President or the Secretary of War.

2. By sentence of a general court-martial or military commission.

3. By direction of the commander of a territorial department or mobilized division, by purchase, under rules governing such discharge; on account of disability not due to misconduct; on account of *a sentence to imprisonment by a civil court, whether suspended or not; or under the provisions of paragraphs 126 and 148½.*

4. In compliance with an order of one of the United States Courts, or a justice or a judge thereof, on a writ of habeas corpus. (139)

Final statements to be furnished upon discharge. When an enlisted man is discharged, his company commander will furnish him with a final statement, in duplicate, or a full statement in writing of the reasons why such final statement is not furnished. A final statement will not be furnished to a soldier who has forfeited all pay and allowances and has no deposits due him. If he has deposits, a final statement will be issued, containing a full statement of the soldier's accounts at the date of his discharge, in order that the quartermaster may determine whether there is any balance of stoppages which should be collected from the amount due for deposits. (140)

Discharge by purchase and by reason of dependent parent. After a soldier has been in the service one year, he may purchase his discharge. Soldiers may also be discharged by reason of dependent relatives. The rules governing such discharges are published in War Department orders. (144)

Certificate of discharge to be furnished upon discharge. Whenever an officer of the grade of colonel, lieutenant-colonel or major of any staff corps or department, is present with a command, discharges of enlisted men of that corps or department may be signed by such officer. (147)

Character of discharge. The character given on a discharge will be certified to by the company or detachment commander, and great care will be taken that no injustice is done the soldier. Where, upon expiration of term of service, the company or detachment commander is of the opinion that *the soldier's reënlistment should not be recommended*, he shall, if practicable, so notify the soldier at least 30 days prior to discharge, and shall at the same time notify the commanding officer, who will in every such case convene a board of officers, three if practicable, to determine *whether the soldier's reënlistment should or should not be recommended* and the kind of discharge that should be given to him under the provisions of paragraph 150. The soldier will in every case be given a hearing before the board. (148)

Loss of discharge certificate. Discharge certificate. An application for certificate in lieu of lost or proof of the loss or destruction of a discharge certificate, without the fault of the person entitled to it, the War Department may issue to such person a certificate of service, showing date of enlistment in and discharge from the Army and character given on discharge certificates will not be made in duplicate. Upon satisfactory destroyed discharge certificate will be forwarded by the applicant's immediate commanding officer directly to The Adjutant General of the Army. Discharge cer-

tificates must not be forwarded to the War Department in correspondence unless called for. (151)

Discharge because of physical disability. When an enlisted man is permanently unfitted for military service because of wounds or disease, he should, if practicable, be discharged on certificate of disability before the expiration of the term of service in which the disability was incurred. Certificates of disability for discharge will not be made in duplicate. (159)

A soldier discharged because of wounds, injury or disease incurred in line of duty is entitled to a pension of from \$6 to \$100 a month, depending upon the degree of disability. (Author)

Death of soldier; securing effects and notifying nearest relative and The Adjutant General of the Army. In case of the death of a soldier his company commander will secure his effects, make an inventory of same and notify his nearest relative. A report is also made to The Adjutant General of the Army, giving cause of death, whether or not it was from wounds or disease contracted in line of duty, and whether or not it was from wounds or disease the result of his own misconduct. (162)

Disposal of effects of deceased soldier. If the effects of a deceased soldier are not claimed within a reasonable time, they will be sold by a council of administration and the proceeds deposited to the credit of the United States. There is no authority for officers to pay the debts of deceased soldiers. Watches, trinkets, personal papers, and keepsakes will not be sold, but will be sent to The Adjutant General of the Army for the benefit of those legally entitled thereto. (163)

Effects of deceased soldier to be delivered to legal representatives; application for arrears of pay and proceeds of sale. The effects will be delivered, when called for, to the legal representatives of the deceased, and the receipts therefor forwarded to The Adjutant General of the Army. Application for arrears of pay and proceeds of sale of effects of deceased soldiers should be addressed to the Auditor for the War Department, Washington, D. C. (165)

Disposal of remains of deceased soldier. The remains of a deceased enlisted man on the active list may be shipped to the home of the decedent or to a national cemetery for interment. When death occurs in the United States or in Alaska, and early shipment is practicable, the remains will be prepared for shipment and the nearest relative notified by telegraph with request to reply by telegraph, stating whether or not it is desired to have the remains shipped home at Government expense, and if shipment home is desired to designate the destination and the name of the person to whom the remains are to be consigned; in which case the remains will be transported to the point designated and the consignee notified by telegraph. Should the nearest relative state that it is not desired to have the remains shipped home, or if it is impossible to ascertain the relative's desire within a reasonable time, interment will be made in the nearest military post or national cemetery, or, if the commanding officer deem proper, at the place of death. If the relatives direct that the remains be not shipped home and they are interred at the expense of the Government, subsequent disinterment or shipment of the remains at the request of the relatives will not be

made at Government expense. If the remains are interred in a military post or national cemetery, or at the place of death, the expenses incident to the interment will be limited to \$35. If the remains are to be shipped, the expenses, exclusive of the cost of transportation, will be limited to \$50 and restricted to the cost of the casket, shipping case, and the reasonable and necessary expenses of preparing the remains for shipment. When it is impracticable to ship the remains at the time of death, or if it is impossible to communicate with the relatives before interment, the remains may be subsequently disinterred and shipped home at Government expense at the request of the relatives. (167)

Admission to Soldiers' Home. An honest and faithful service of 20 years in the Army entitles a soldier to admission to the Soldiers' Home, Washington, D. C.

When a soldier, by reason of long service or disability contracted in the line of duty, desires to enter the Soldiers' Home his company commander will so report to The Adjutant General of the Army, giving all the details necessary for a full understanding of the case, including the date of each enlistment, with company and regiment, the report to be forwarded directly by the post commander. If the soldier be physically disabled, the report will be accompanied by certificates of disability. The papers will be referred to the board of commissioners of the home, and if, in its opinion, the soldier is entitled to become an inmate, the necessary authority will be given for his discharge at the place where he is serving. He may then proceed to Washington and report to the board of commissioners for admission to the home. (178 and 179)

Medal of Honor. Medals of honor authorized by Congress are awarded to officers and enlisted men in the name of the Congress for particular deeds of most distinguished gallantry in action.

In order that the medal of honor may be awarded, officers or enlisted men must perform in action deeds of most distinguished personal bravery or self-sacrifice above and beyond the call of duty so conspicuous as clearly to distinguish them for gallantry and intrepidity above their comrades, involving risk of life or the performance of more than ordinarily hazardous service, and the omission of which would not justly subject the person to censure as for shortcoming or failure in the performance of his duty. The recommendations for the medal will be judged by this standard of extraordinary merit, and incontestable proof of the performance of the service will be exacted. (182)

Certificate of merit. When any enlisted man of the army shall have distinguished himself in the service, the President may grant a certificate of merit to him, on the recommendation of the commanding officer of the regiment to which he belongs. (184)

Recommendations for a certificate of merit must be based upon the statement of an eye witness, preferably the immediate commander. The act or acts by which the enlisted man distinguished himself must be specifically described, and when the recommendation is made by a commissioned officer who was an eye witness, it must be so stated. When a commissioned officer was not an eye witness, the testimony, when practicable, of at least two eye witnesses who so describe themselves must accompany the recommendation. (185)

Additional pay at the rate of \$2 a month from the date of the distinguished service is allowed to each enlisted man to whom a certificate of merit is granted. (186).

Neither a medal of honor nor a certificate of merit will be awarded in any case when the service of the person recommended, subsequent to the time he distinguished himself, has not been honorable.

The proviso in this paragraph regarding honorable service applies to the award of campaign badges. (188)

Orderly observance of Sabbath. An orderly observance of the Sabbath by the officers and men in the military service is enjoined. (205)

Bunks, arms and accouterments. In quarters the name of each soldier will be attached to his bunk, arms will be kept in racks, and accouterments and sabers will be hung up by the belts. (285)

Cleanliness of men and police of barracks. Strict attention will be paid by company commanders to the cleanliness of the men and to the police of barracks or tents. The men will be required to bathe frequently. In garrison, and whenever practicable in the field, they will be required to wash their hands thoroughly after going to the latrines and before each meal, in order to prevent the transmission of typhoid fever and other diseases by germs taken into the mouth with food from unclean hands. The hair will be kept short and the beard neatly trimmed. Soiled clothing will be kept in the barrack bag. (286)

Preparation for Saturday inspection. A thorough police of barracks will precede the Saturday inspection. The chiefs of squads will see that bunks and bedding are

overhauled, floors, tables, and benches scoured, arms and accouterments cleaned, and all leather articles polished. (287)

Chiefs of squads responsible for cleanliness of their men. Chiefs of squads will be held responsible for the cleanliness of their men. They will see that those who are to go on duty put their arms, accouterments, and clothing in the best order, and that such as have passes leave the post in proper dress. (288)

Uniform. Soldiers will wear uniform in camp and garrison. When on fatigue they will wear suitable fatigue dress. (289)

Property in possession of enlisted men. Company commanders will see that all public property in the possession of enlisted men is kept in good order, and that missing or damaged articles are duly accounted for. (290)

Taking arms apart; polishing of certain parts; beautifying or changing finish; use of tompions, etc. Enlisted men will not take their arms apart except by permission of a commissioned officer under proper supervision, and only in the manner prescribed in the descriptive pamphlet of the arm issued by the Ordnance Department. The polishing of blued or browned parts of small arms, rebluing or rebrowning, putting any portion of an arm in a fire, or removing a receiver from a barrel, is prohibited. The mutilation of any part by filing or otherwise, and attempts to beautify or change the finish, are prohibited. Pieces will be unloaded before being taken to quarters or tents, and as soon as the men using them are relieved from duty, unless otherwise ordered. The use of tompions in small arms is forbidden. The

prohibition in this paragraph of attempts to beautify or change the finish of arms in the hands of enlisted men is not construed as forbidding the application of raw linseed oil to the wood parts of the arms. This oil is considered necessary for the preservation of the wood, and it may be used for such polishing as can be given by rubbing in one or more coats when necessary. The use of raw linseed oil only will be allowed for redressing, and the application for such purpose of any kind of wax or varnish, including heelball, is strictly prohibited. (292)

Only authorized dressing or polishing material to be used. It is forbidden to use any dressing or polishing material on the leather accouterments or equipments of the soldier, the horse equipments for cavalry, or the artillery harness, except the preparations supplied by the Ordnance Department for that purpose. (293)

Taking photographs of fortifications and giving information about them prohibited. The taking of photographic or other views of permanent works of defense will not be permitted. Neither written nor pictorial descriptions of these works will be made for publication without the authority of the Secretary of War, nor will any information be given concerning them which is not contained in the printed reports and documents of the War Department. (348)

Police of quarters and premises. After breakfast, and after stable duty in the mounted service, the tents or quarters and adjacent ground will be policed by the men of the companies and the guardhouse or guard tent by the prisoners, or by members of the guard if there be no prisoners. (374)

Honors and courtesies. Everything in the Army Regulations about honors and courtesies that affects enlisted men is covered in Chapter V, "Military Courtesy."

Loss of, or damage to, public property. If an article of public property be lost or damaged by the neglect or fault of any officer or soldier, he shall pay the value thereof, or the cost of repairs, at such rates as may be determined by a survey of the property. (685)

The amount charged against an enlisted man on the pay rolls on account of loss or damage of, or repairs to, Government property shall not exceed the value of the article or cost of repairs; and such charge will only be made on conclusive proof, and never without a survey, if the soldier demand it. He will be informed at the time of signing the pay rolls that his signature will be regarded as an acknowledgment of the justice of the charge. (686)

Re-enlistment of men undergoing treatment for injuries incurred or disease contracted in line of duty. Enlisted men of good character and faithful service who, at the expiration of their terms, are undergoing treatment for injuries incurred or disease contracted in the line of duty, may be reënlisted if they so elect, and if the disability prove to be permanent, they will subsequently be discharged on certificates of disability. An enlisted man not under treatment, but who has contracted in the line of duty infirmities that may raise a question of physical eligibility to reënlistment, but not such as to prevent his performing the duties of a soldier, may be reënlisted by authority of the War Department on application made through the surgeon and proper

military channel in time to receive a decision before the date of discharge. (863)

Neglect to take proper care of rooms or furniture. Neglect by any officer or soldier to take proper care of rooms or furniture used by him is a military offense. In case of damage, such officer or soldier may be allowed to pay cost of necessary repairs if the commanding officer deem such payment sufficient. (1011)

Articles of tableware and kitchen utensils. Any articles of tableware and kitchen utensils that may be damaged, broken, destroyed, or lost through the carelessness of enlisted men will be charged against their pay. (1178)

Ration. A ration is the allowance for the subsistence of one person for one day. (1202)

Forfeiture of commutation of rations for failure to return from furlough on time. A soldier on furlough who fails to report at his proper station on or before the last day of his furlough unless discharged will forfeit his commutation of rations. (1229)

Continuous service pay. Any enlisted man honorably discharged at the termination of an enlistment period who reenlists within three months thereafter shall be entitled to continuous-service pay in addition to the initial pay provided by the act of May 11, 1908, as follows: Where the initial pay is \$36 or more a month, an increase of \$4 monthly pay for and during the second enlistment, and a further monthly increase of \$4 for and during each subsequent enlistment up to and including the seventh enlistment. Where the initial pay is \$18, \$21, \$24, or \$30, an increase of \$3 monthly pay for and during the second enlistment, and a further monthly in-

crease of \$3 for and during each subsequent enlistment up to and including the seventh. Where the initial pay is \$15 and \$16, an increase of \$3 monthly pay for and during the second and third enlistments each, and a further monthly increase of \$1 for and during each subsequent enlistment up to and including the seventh. After the seventh enlistment the pay shall remain as in the seventh enlistment. (1339)

Certificate of merit. A certificate of merit granted to an enlisted man for distinguished service entitles him, from the date of such service, to additional pay at the rate of \$2 a month during military service, whether as an enlisted man or as an officer, although such service may not be continuous, and is payable in full to a retired enlisted man. (1341)

Foreign service pay. The 20 per cent allowed by law to enlisted men serving beyond the limits of the United States and Territories contiguous thereto, except the Canal Zone, Panama, or Hawaii or Porto Rico, is payable from date of departure from the United States until date of return thereto; but enlisted men entitled to this increase are not entitled to receive extra-duty pay. (1342)

Marksmanship pay, Coast Artillery. An enlisted man qualified as a gunner in the Coast Artillery Corps is entitled to pay at the rate of \$3 a month if he be a first-class gunner, and at the rate of \$2 a month if he be a second-class gunner, in addition to his pay, for a period of three years from the date of qualification: *Provided*, That during such period he continues to be a member of the Coast Artillery Corps, or reënlists in that branch of the service within three months from date of discharge

therefrom. The interval between the date of discharge and date of reenlistment will be counted as a part of the three-year period for which he is entitled to gunner's pay.

The fact of qualification will be published in coast defense command orders, which will give the date of actual qualification from which the soldier is entitled to the additional pay. Notation will be made on the pay rolls as follows: The first roll on which the soldier is mustered for and paid the additional pay will give the date of actual qualification, and the number, date, and source of the order in which such qualification is announced. Subsequent rolls will set forth the date on which the original qualification expires, thus: "First-class gunner to May 15, 1915." In case the soldier is discharged before his qualification has been published in orders, notation will be made on the final statement of the fact and date of the qualification, and that orders announcing such qualification have not been received. Such notation will authorize the payment of the amount due the soldier as additional pay, and if such additional pay is due for a period prior to the date to which last paid that fact must be shown.

If, by reason of the exigencies of the service, and not from neglect on his part, a gunner is prevented from participating in the regular gunners' examination of his company prior to the expiration of his qualification, such qualification will continue in force until such time as he may have an opportunity to be examined for requalification, in accordance with existing orders governing the examination and qualification of gunners, such extension not to exceed one year. Such hold-over quali-

fication will be published in orders and the number, date, and source of the order will be entered on the first pay roll on which the additional pay is drawn. The date of expiration of the qualification and the fact of extension will be entered on succeeding rolls in the following manner: "Original qualification first-class gunner expired May 15, 1915, classification extended."

Except in case of urgent necessity, a furlough will not be granted to a gunner immediately before the expiration of his term of qualification when his absence would prevent him from requalifying at the regular gunners' examination.

An enlisted man of the coast artillery qualified and rated as a plotter, an observer, first class, or a casemate electrician is entitled to \$9 a month, and as a gun pointer, gun commander, observer, second class, chief planter or chief loader, to \$7 per month, in addition to his pay.

The first pay roll on which a soldier is mustered for additional pay by reason of having been appointed to a rated position will set forth the date of such appointment, and the number, date, and source of the order announcing the same, and also the date on which such appointment expires by limitation. Subsequent rolls will simply show the rated position held, as "planter," "chief loader," and when disrated the date thereof will be given. If disrated before his appointment expires by limitation, he reverts to a status of being entitled to pay as first-class gunner, and remarks should be entered on the pay roll as herein provided for first-class gunners.

No enlisted man shall receive at the same time additional pay for more than one of the classifications named

in this paragraph and in paragraphs 1344 and 1345. (1343)

Marksmanship pay, Field Artillery. An enlisted man qualified as a gunner in the field artillery is entitled to pay at the rate of \$3 a month if he be a first-class gunner, and at the rate of \$2 a month if he be a second-class gunner, in addition to his pay, from the date of qualification to December 31 of the year next succeeding the year in which the qualification was made: *Provided*, That during such period he continues to be a member of the field artillery or reënlists in that branch of the service within three months from date of discharge therefrom. (1344)

Marksmanship pay, organizations armed with rifle. Enlisted men qualifying as expert riflemen are entitled to \$5 a month, those qualifying as sharpshooters to \$3 a month, and those qualifying as marksmen to \$2 a month, in addition to their pay, from the date of qualification to the end of the enlistment in which they qualify, provided that during that time they do not attain a higher classification and that they continue to be members of an organization armed with the rifle, in which qualification is authorized.

A soldier who reënlists in an organization armed with the rifle, in which qualification is authorized, within three months from the date of discharge from such an organization will continue to receive, for one year from the date of such reënlistment, the extra compensation to which he was entitled at the date of discharge, provided that the soldier does not attain a different classification within that period. This provision applies also to a soldier who reënlists within three months after receiving

an honorable discharge from the Marine Corps while holding a qualification as expert rifleman, sharpshooter, or marksman therein.

In case a reenlisted soldier in the first year subsequent to his reenlistment qualifies in a grade *different from that* held in his prior enlistment, extra compensation for the grade held in his prior enlistment will cease and that for the grade in which he qualified will *begin on the date of his new qualification*. Qualification cannot be made in the Coast Artillery Corps nor in bands of any arm. (1345)

Allotments. Every enlisted man absent on distant duty shall be allowed to allot such portion of his pay as he may desire for the support of his family or relatives, for his own savings, or for any other purpose, excepting that of obtaining an advance on his pay; but the allotment privileges to soldiers serving within the boundaries of the United States will be limited to the support of their families and relatives. (1347)

Capture by enemy of soldiers who have made allotments. In case of the capture by the enemy of soldiers who have made allotments which may expire after their capture, the monthly payments of the same shall be continued until otherwise ordered by the Secretary of War. (1355)

Renewal of discontinued allotments. When an allotment is discontinued, at the request of the person making it, before the expiration of the term for which it is granted, it shall not be renewed within that term except by permission of the regimental or post commander, on satisfactory reasons being given for such discontinuance and renewal. (1360)

Deposits. An enlisted man, not on the retired list, may deposit his savings with any quartermaster in sums of not less than \$5; the same to remain so deposited until final payment on discharge or until furloughed to the reserve. The quartermaster will furnish to each depositor a book in which each deposit, with the name of the depositor, date, place, and amount, in words and figures, will be entered in the form of a certificate, signed by the quartermaster and company commander. The transfer, pledge, or sale of a deposit book is prohibited. (1861)

Loss of deposit book. Before delivering final statements upon which deposits are credited, the officer signing them will ascertain whether the soldier has the deposit book; and, if so, instruct him to present it to the quartermaster. Should he claim to have lost it, the officer will cause his affidavit to that effect to be taken before he leaves the post and attached to the statement. The affidavit will clearly state the circumstances attending loss of the book and show that the soldier has not sold or assigned it. Upon this evidence the quartermaster may pay and the responsibility for the correctness of amounts credited on the statement will rest with the officer certifying them. (1863)

Deposits to be paid only on final statements; importance of preserving deposit books. Quartermasters will not pay deposits except on final statements. When they are not paid the soldier should forward his deposit book or the evidence referred to in the preceding paragraph to the Chief of the Quartermaster Corps. Enlisted men should be informed of the importance of

preserving deposit books as the only certain means of insuring prompt repayment. (1864)

Deposits to be drawn upon discharge or furlough to reserve. A soldier must draw his deposit when he is discharged or furloughed to the reserve. He can then renew it after reënlistment, and will be entitled to interest thereon from the date of such renewal. Failure to present the final statements leaves the money without interest until it is drawn and again deposited. A discharged soldier who desires, after reënlistment, to have all or a part of the money due to him on discharge deposited under the provisions of paragraph 1361, must furnish to the quartermaster who makes payment on his final statement a written order requesting that such part of the amount due thereon, as he may desire so deposited, be transferred to his new account. The quartermaster will file this order with the paid final statement as authority for this disposition of the money due to the soldier. (1865)

Interest on deposits. For any sum of not less than \$5 deposited for the period of six months or longer the soldier, when discharged or furloughed to the reserve, will be paid interest at the rate of 4 per cent per annum to date of discharge. (1866)

Forfeiture of deposits by desertion. Both deposits and interest will be forfeited by desertion, but forfeiture of them cannot be imposed by sentence of a court-martial. They are exempt from liability to meet a sentence of a court-martial imposing forfeiture of pay or allowances, and from liability for the soldier's private debts. Deposits and interest are not exempt from lia-

bility for debts due to the United States or to individuals. (1368)

Forfeiture of pay while in confinement by civil authorities. Officers and enlisted men in arrest and confinement by the civil authorities will receive no pay for the time of such absence; if released without trial, or after trial and acquittal, their right to pay for the time of such absence is restored. (1371)

Pay of deserters. An enlisted man charged with desertion will not receive pay until his offense has been investigated by a court-martial, or he has been restored to duty without trial, or the charge has been set aside as having been erroneously made. (1372)

Every deserter forfeits all pay and allowances due at the date of desertion. (1373)

Payment of soldiers discharged or furloughed to the reserve. Discharged soldiers and those furloughed to the reserve will be paid on final statements prepared in duplicate and furnished to them by their company or detachment commanders. Payment will be made only on presentation of both copies. (1375)

Transportation and subsistence allowance in case of discharge or furlough to the reserve. When an enlisted man is discharged from the service, except by way of punishment for an offense, or is furloughed to the reserve, he shall be entitled to transportation in kind and subsistence from the place of his discharge or furlough to the place of his enlistment, or to such other place within the continental limits of the United States as he may select; to which the distance is no greater than that from the place of discharge or furlough to place of enlistment; but if the distance be greater he may be

furnished with transportation in kind and subsistence for a distance equal to that from place of discharge or furlough to place of enlistment, or in lieu of such transportation and subsistence, he shall, if he so elects, receive 2 cents a mile, except for sea travel, from the place of his discharge to the place of his enlistment: *Provided*, That for sea travel on discharge or furlough transportation and subsistence only shall be furnished to enlisted men: *And provided further*, That for the purpose of determining allowances for all travel of enlisted men on discharge or furlough, travel in the Philippine Archipelago, the Hawaiian Archipelago, the home waters of the United States, and between the United States and Alaska shall not be regarded as sea travel and shall be paid for at the rates established by law for land travel within the boundaries of the United States.

Officers furnishing transportation in kind and subsistence to an enlisted man on discharge or furlough to the reserve will endorse such fact on his final statement, showing points between which furnished and cost of subsistence. (C. A. R., No. 36, Dec. 8, 1915.)

When a discharged soldier elects to receive 2 cents a mile in lieu of transportation in kind and subsistence for travel from place of discharge to place of enlistment, such travel allowance is *not* subject to deduction to make good indebtedness of the soldier to the United States or to such instrumentalities of the Government as shall have been legally established, such as *post exchanges* or company funds. (1378)

Soldier discharged for fraud in enlistment, not entitled to transportation and subsistence. An enlisted man discharged for minority concealed at enlist-

ment, or for other cause involving fraud on his part in the enlistment, is not entitled to pay and allowances, including those for travel, and will not receive a final statement unless deposits are due him, in which case a final statement, containing a full statement of the soldier's accounts at date of discharge, will be furnished. (1880)

Final statements and discharge of soldiers undergoing sentence at date of discharge and of those in the hands of civil authorities. A soldier held in military custody under sentence of court-martial beyond his term of enlistment (except where dishonorable discharge is imposed) will be furnished with a final statement showing the actual date of discharge and the cause of detention. A soldier in the hands of civil authorities awaiting trial should, at the expiration of his term of service, be furnished with his discharge certificate and a final statement containing all necessary data for the quartermaster, giving date and cause of arrest and remarks "Not entitled to pay or clothing since date of arrest nor to travel pay unless acquitted or released without trial." (1881)

Transfer of claim for pay. The transfer by an enlisted man of a claim for pay due on his final statement will be recognized only when made after discharge, or on being furloughed to the reserve, in writing, indorsed on the final statement, signed by the soldier, and witnessed by a commissioned officer or by some other reputable person known to the quartermaster. The person witnessing the transfer must indorse on the discharge the fact of transfer of the final statement, and on

the final statement the fact that such indorsement has been made on the discharge. (1383)

Gratuity in case of death. When any officer or enlisted man on the active list of the Army dies from wounds or disease not the result of his own misconduct, his widow, or some other person duly designated by him, is entitled to receive, through the Quartermaster Corps, an amount equal to six months' pay at the rate such officer or enlisted man was receiving pay at the date of his death, less \$75 in the case of each officer and \$35 in the case of each enlisted man. Any residue of the sums thus reserved, after the expenses of interment have been met therefrom, will be paid subsequently to the same beneficiary. Each officer and enlisted man in service on the active list will file on the form furnished for that purpose by The Adjutant General of the Army the full name and address of the person to whom he wishes the half year's salary paid in the event of death, and he may also file on the said form the full name and address of the person to whom he wishes the half year's salary paid in the event of the death of the first named beneficiary prior to the date of payment of the gratuity. The signature in every case will be witnessed and attested as required by the printed notes on the form. Should an officer or enlisted man desire to change a beneficiary previously designated by him and to make a new designation, he may do this by filling up and forwarding to The Adjutant General of the Army another blank of the prescribed form, properly signed, witnessed, and attested. (1385)

Only authorized persons allowed to accompany sick and wounded to the rear. No person, except the

proper medical officers or the officers, noncommissioned officers, and privates of the ambulance service, or such persons as may be specially assigned by competent military authority to duty therewith, will be permitted to take or accompany sick or injured men to the rear, either on the march or elsewhere. (1437)

Arms and accouterments not to be taken to hospital. Patients will, if possible, leave their arms and accouterments with their companies. (1450)

Artificial limbs. Every officer, enlisted man, or employee of the military forces of the United States who, in the line of duty, or through disease contracted in service, shall have lost a limb, or the use of a limb, will receive once every three years an artificial limb or appliance, or commutation therefor if he shall so elect, under such regulations as the Surgeon General of the Army shall prescribe. The money value allowed as commutation is, for a leg, \$75; for an arm, foot, and apparatus for resection, \$50. (1490)

Necessary transportation, including sleeping car accommodations, required for travel to place where artificial limbs may be fitted, will be furnished by the Quartermaster Corps, the cost to be refunded from any money appropriated for the purchase of artificial limbs. (1491)

Ammunition expended without orders. Ammunition expended by a soldier without orders, or not in the line of duty, or which may be damaged or lost through his neglect, will be charged to him. (1530)

UNIFORM REGULATIONS

(The numbers following the paragraphs are those of the Uniform Regulations.)

Alterations, fitting of uniforms, etc. Alterations will not be made in any article of the uniform that will result in a material change from the cut prescribed for it in regulations; nor will hooks be placed on the front of the coat below the buttons. Company commanders will exercise personal supervision over the fitting of the uniforms of the men of their companies, and permit only such changes as will insure a proper fit without disturbing the general appearance of the uniform. (4)

Athletic clothes. Tennis, baseball, football, golf, and other athletic clothes may be worn when engaged in athletic games and sports. (5)

Civilian clothing. Enlisted men on pass and furlough. Enlisted men may wear civilian clothing on furlough, and within the continental limits of the United States they may be authorized by the commanding officer to wear civilian clothing when on pass.

The wearing of civilian clothing within the post by officers and enlisted men will be restricted to the time necessary in entering and leaving same.

Not to be accompanied by parts of uniform. When officers or enlisted men wear civilian dress, it will not be accompanied by any mark or part of the uniform, except that officers may wear service breeches and regulation leather leggings or russet-leather boots with civilian coat when riding outside of post limits and off duty. The use of the service hat and the regulation saddle-cloth by officers riding in civilian clothes is prohibited.

Optional wear of rosettes and buttons. Rosettes or buttons of approved pattern, to consist of ribbons of the same color as those that pertain to the several service medals and badges, are authorized for optional wear with civilian clothing on the part of those persons to whom such medals and badges have been awarded or may be awarded, in lieu of the medals or badges to which such rosettes or buttons pertain respectively. (10)

Civilians not to wear the uniform. In Alabama, Arizona, Arkansas, California, Connecticut, Florida, Georgia, Idaho, Illinois, Iowa, Maine, Maryland, Michigan, Mississippi, Missouri, Montana, New Hampshire, New Mexico, New York, North Dakota, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Washington, West Virginia, and Wisconsin it is a misdemeanor for any person not an officer or enlisted man of the United States Army, Navy, Marine Corps, National Guard, Revenue Service or Forestry Service, or inmate of a veterans' or soldiers' home to wear the uniform of the United States Army. The law does not apply to persons of the theatrical profession while actually engaged in their profession. (11)

Conformity of articles of the uniform and arms and equipments to standard patterns, and publication of descriptions and specifications of same. All articles of the uniform, including garments of headgear, footgear, ornaments, insignia, buttons, decorations, and other articles herein specified, will, with the exceptions stated in this paragraph, conform in the quality, design, and color to the sealed patterns in the office of the Quartermaster General, who will from time to time publish descriptions and specifications of such patterns. *Excep-*

tions: Officers' collars, cuffs, evening dress shirts, neckties, shirt studs, shoes, socks, and white gloves; also suspenders for officers and enlisted men. (12)

Decorations, jewelry, etc. No decoration received from a foreign government, and no civilian decoration or jewelry, watch chains, fobs, etc., shall appear exposed on the uniform. (13)

Dignity of the uniform. Officers, especially organization commanders, will impress upon enlisted men that the dignity of the uniform and the respect due it are best preserved when its wearers so conduct themselves as never to cast discredit upon it. Permission to wear civilian clothes should never be granted enlisted men merely as a reward for good conduct, as this would appear to discredit the uniform. Such permission should be given only when conditions indicate that it would be for the best interests of the service, and is not in violation of the provisions of these regulations. (15)

Discrimination against the uniform a misdemeanor in the District of Columbia, territories, insular possessions and certain states. In the District of Columbia, in any Territory, the District of Alaska, and any insular possession of the United States, and in the States of Connecticut, Florida, Massachusetts, Minnesota, New Hampshire, New York, Oklahoma, Pennsylvania, Rhode Island, and Wyoming, it is a misdemeanor for the proprietor, manager, or employee of a theatre or other public place of entertainment or amusement to discriminate against any person lawfully wearing the uniform of the Army of the United States. (16)

Special courts-martial and courts of inquiry will hold their first session in the dress or service uniform, as the president may prescribe. Thereafter the court will decide the uniform. Side arms will be worn.

The judge advocate and counsel will wear the same uniform as the court, without side arms; so will the accused, when practicable.

Witnesses and orderlies will appear in the same uniform as the court, with side arms. (21)

General courts-martial will hold their first session in such uniform as may be prescribed by the president. Thereafter the court will decide the uniform, except that when the members of a general court-martial are assembled from different stations the president of the court will, upon receipt of the order convening the court, at once notify every member of the uniform to be worn, and all sessions of the court will be held in the uniform so prescribed by the president. Side arms will be worn.

The judge advocate and counsel will wear the same uniform as the court, without side arms; so will the accused, when practicable.

Witnesses and orderlies will appear in the same uniform as the court, with side arms. (22)

Guard. The uniform of the guard will be prescribed by the commanding officer, and unless he orders a change, individual members of the guard will wear until retreat the identical garments in which they are mounted. After retreat, and until breakfast, they may wear other garments of the uniform prescribed. (23)

Orderlies will wear side arms. In garrison, musician orderlies will wear only the belt; with the dress or full-dress uniform they will wear white gloves. (30)

Over-sea traveling. Whenever enlisted men, including recruits, are ordered to over-sea stations, except in Alaska, commanding officers of military posts and stations, including recruit depots, will see that each soldier, upon departing for the point of embarkation, has one suit of fatigue uniform and two suits of cotton olive-drab in his telescope case or canvas bag for use aboard the transport. (31)

Retired enlisted men may wear the pattern of uniform prescribed at the date of their retirement, except that the insignia of corps, department, or arm of service will be omitted. (40)

Summary court. The summary court officer, the accused, and the witnesses will wear the uniform of the command, without side arms. (46)

Unauthorized articles of uniform. Enlisted men will not be permitted to wear any articles of uniform which are not furnished by the Quartermaster Corps, nor will they be permitted to wear articles of the uniform other than those furnished to the organization to which they belong. (48)

Unauthorized combinations. (a) Combinations of various articles of the uniform other than the combinations prescribed in these regulations are prohibited.

(b) Former post commissary sergeants and other enlisted men transferred to the Quartermaster Corps may continue to wear the uniform of their corps, department, or arms of the service in their possession at time of transfer until such uniforms, including service chevrons and trouser's stripes, are worn out, changing insignia and grade of chevrons only at time of transfer to

conform to those prescribed for enlisted men in the Quartermaster Corps. (49)

Uniforms to be worn in camp and garrison. Enlisted men will at all times, whether on or off duty, wear the uniform except when wearing civilian clothing as authorized in the Uniform Regulations. (51)

United States Army transports in time of peace. Enlisted men will wear the service uniform and those on fatigue duty the fatigue uniform. (53)

Badges, medals, ribbons and marksmanship insignia described in the Uniform Regulations are a part of the uniform and will be worn as prescribed. (56 and 97)

Ribbons are worn with the dress and service uniforms. (97)

The various distinctive marks awarded for excellence in marksmanship, and the swordsman's badge may be worn with the full dress, the dress, and the service uniforms. However, they will not be worn in the field.

Badges and medals will be worn on the left breast of the coat in a horizontal line, about 4 inches below the middle point of the top of the shoulder, those with ribbons being suspended from a bar of metal passed through the upper ends and tops of the ribbons. The badges and medals that have ribbons will be worn in but one line, overlapping if necessary.

Distinctive marks awarded for excellence in marksmanship are worn in a similar manner, except that they are not suspended from bars of metal passing through ribbons.

When marksmanship badges are worn with ribbons, the badges will be worn under the ribbons, in a horizontal

line parallel to and three-eighths inch from the bottom of the ribbons.

If necessary to have more than one line of badges and medals, the second line will be placed below the first line, the bars from which the badges and medals are suspended being parallel to the upper bar and three-eighths inch from the bottom of the lowest medal, the middle of the lower line of medals being in the same vertical line as the middle of the upper line. (58)

Insignia on sweater or olive drab shirt. The insignia of rank of noncommissioned officers will be worn on the sleeve of the sweater and shirt, when the latter is worn without coat or sweater. (86, 102)

Coats and overcoats. Coats and overcoats will be buttoned throughout when worn. (68, 92)

The pockets of the coats and also the pockets of olive drab shirts worn without coats, must always be buttoned. (Author)

Suspenders may be worn, but they must not be visible. (110)

Waist belts issued by the Quartermaster Corps will be worn when the olive drab shirt is worn without the coat or sweater. They may be worn at other times, if so desired. (113)

White collars. With the dress and the full dress uniform, and with the service uniform when worn on pass from garrison, enlisted men will wear a plain standing white collar; the collar to show one-fourth inch above the collar of the coat. (115)

Service hat. The service hat will be worn peaked with four indentations, and with the hat cord sewed on. (Table of Occasions, page 62)

Service uniform not to be worn after retreat. Except by members of the guard, the service uniform will not be worn out of barracks after retreat by enlisted men in garrison, unless especially authorized by the commanding officer. (Notes 1 and 3, page 62)

Trousers. Trousers, cotton or woollen service, may be issued to and worn without leggins to such enlisted men as are on duty in offices, in the buildings in which offices are situated, including enlisted men of the hospital corps while on duty in dispensaries. The trousers will be worn only during the time actually engaged in such office duty. (Note 9, page 63)

White uniform. Cooks and bakers are authorized to wear white when working in the kitchen and bakery, and members of the hospital corps may also wear white in the hospital. However, there is no authority for their wearing white outside of the buildings named. (Table of Occasions, page 64)

Fatigue uniform for noncommissioned officers. Noncommissioned officers in charge of working parties will not wear the fatigue uniform unless their duties be such as to make it necessary.

WAR DEPARTMENT ORDERS

Persuading or assisting men to desert; concealing deserters. Whoever attempts to persuade or assist a soldier to desert or to attempt to desert, or whoever conceals, protects or assists a soldier who has deserted, shall be imprisoned not more than three years and fined not more than two thousand dollars. (Sec. 42, G. O. 22/10)

Forfeiture of pay during absence from duty on account of disease due to misconduct and making

good time lost. No enlisted man who shall be absent from duty on account of disease resulting from his own intemperate use of drugs or alcoholic liquors or other misconduct shall receive pay for the period of absence. No enlistment shall be regarded as complete until the soldier shall have made good any time in excess of one day lost by unauthorized absences, or on account of disease resulting from his own intemperate use of drugs or alcoholic liquors or other misconduct, or while in confinement awaiting trial or disposition of his case if the trial results in conviction, or while in confinement under sentence. (G. O. 45/14)

Except as to unauthorized absences in excess of one day, the above applies only to men who enlisted on or after April 27, 1914, the date the law was passed; men who enlisted prior to April 27, 1914, do not make good time lost through absences due to the other causes mentioned. (Bulletin 39/14)

No enlisted man who shall be absent from duty on account of disease resulting from his own intemperate use of drugs, or alcoholic liquors, or other misconduct, shall receive pay for the period of such absence. Absence from duty because of venereal disease not contracted in line of duty is within the purview of this law; and any man who, on or since August 24, 1912, has been absent or who may hereafter be absent from duty for any such cause or causes, is not entitled to pay, as distinguished from allowances, for the period of such absence. (G. O. 31/12)

Men who expose themselves to venereal disease to take prophylactic treatment. Commanding officers will require that men who expose themselves to

the danger of contracting venereal disease shall at once upon their return to camp or garrison report to the hospital or dispensary for the application of such cleansing and prophylaxis as may be prescribed by the Surgeon General. Any soldier who fails to comply with such instructions shall be brought to trial by court-martial for neglect of duty. (Par. III, G. O. 71/13)

REVISED STATUTES

Sale of clothing, arms, and accouterments prohibited. The clothes, arms, military outfits, and accouterments, furnished by the United States to any soldier shall not be sold, bartered, exchanged, pledged, loaned or given away; and no person, not a soldier, or duly authorized officer of the United States, who has possession of any such clothes, arms, military outfits, or accouterments, so furnished and which have been the subjects of any such sale, barter, exchange, pledge, loan or gift, shall have any right, title or interest therein; but the same may be seized and taken wherever found by any officer of the United States, civil or military, and shall thereupon be delivered to any quartermaster, or other officer authorized to receive the same. The possession of any such clothes, arms, military outfits or accouterments by any person not a soldier or officer of the United States shall be presumptive evidence of such a sale, barter, exchange, pledge, loan, or gift. (Sec. 3748, Revised Statutes)

Purchase of clothing, arms, and accouterments prohibited. Every person who knowingly purchases or receives in pledge for any obligation or indebtedness from any soldier, officer, sailor, or other person called

into or employed in the military or naval service, any arms, equipment, ammunition, clothes, military stores, or other public property, such soldier, sailor, officer, or other person not having the lawful right to pledge or to sell same, every person so offending in any of the matters set forth in this section shall be imprisoned at hard labor for not less than one nor more than five years, or fined not more than one thousand nor less than five hundred dollars. (Sec. 5438, Revised Statutes)

RULES FOR LAND WARFARE

(The numbers following the paragraphs are those of "Rules for Land Warfare.")

The object of war. The object of war is to bring about the complete submission of the enemy as soon as possible by means of regulated violence. (10)

Military necessity. Military necessity justifies a resort to all the measures which are indispensable for securing this object and which are not forbidden by the modern laws and customs of war. (11)

What military necessity admits of. Military necessity admits of all direct destruction of life or limb of *armed* enemies, and of other persons whose destruction is incidentally *unavoidable* in the armed contests of war; it allows of the capturing of every armed enemy, and of every enemy of importance to the hostile government, or of peculiar danger to the captor; it allows of all destruction of property, and obstruction of ways and channels of traffic, travel, or communication, and of all withholding of sustenance or means of life from the enemy; of the appropriation of whatever the enemy's

country affords that is necessary for the subsistence and safety of the army, and of such deception as does not involve the breaking of good faith, either positively pledged, regarding agreements entered into during the war, or supposed by the modern law of war to exist. (12)

What military necessity does not admit of. Military necessity does not admit of cruelty—that is, the infliction of suffering for the sake of suffering or for revenge, nor of maiming or wounding except in fight, nor of torture to extort confessions. It does not admit of the use of poison in any way, nor of the wanton devastation of a district. It admits of deception, but disclaims acts of perfidy; and, in general, military necessity does not include any act of hostility which makes the return to peace unnecessarily difficult. (13)

Cruelty, bad faith, extortion, revenge, etc., prohibited. The law of war not only disclaims all cruelty and bad faith concerning engagements concluded with the enemy during the war, but also the breaking of treaty obligations entered into by belligerents in time of peace and avowedly intended to remain in force in case of war between the contracting powers. It disclaims all extortion and other transactions for individual gain; all acts of private revenge, or connivance at such acts. Offenses to the contrary shall be severely punished, and especially so if committed by officers. (18)

The effect of war on individuals. The first effect of war between two states is to cause every subject of the one to become an enemy of every subject of the other, since it is impossible to sever the subjects from their state. (24)

Hostilities to be confined to armed forces. It is now universally recognized that hostilities are restricted to the armed forces of belligerents, and that the unarmed citizens who refrain from acts of hostility and pursue their ordinary avocations must be distinguished from the armed forces of the belligerent, must be treated leniently, must not be injured in their lives or liberty, except for cause or after due trial, and must not, as a rule, be deprived of their private property. (26)

Treatment of prisoners. Prisoners of war are in the power of the hostile government, but not of the individuals or corps who capture them. They must be humanely treated. (50)

Subject to military jurisdiction. All physical suffering, all brutality which is not necessitated as an indispensable measure for guarding prisoners, are formally prohibited. If prisoners commit crimes or acts punishable according to the ordinary penal or military laws, they are subjected to the military jurisdiction of the state of the captor. (51)

Personal belongings retained. All their personal belongings, except arms, horses, and military papers, remain their property. (52)

Booty. All captures and booty, except personal belongings of prisoners, becomes the property of the belligerent Government and not the individuals or units capturing them. (56)

Questioning of prisoners of war. Every prisoner of war, if he is questioned on the subject, is bound to give his true name and rank, and if he infringes this rule he is liable to have the advantages accorded to prisoners of his class curtailed. (57)

Although a prisoner of war is bound, under the penalties named, to state truthfully his name and rank, yet he is not bound to reply to other questions. The captor is entitled to take advantage of every means, humane and not coercive, in order to obtain all information possible from a prisoner with regard to the numbers, movements, and location of the enemy, but the prisoner can not be punished for giving false information about his own army. (58)

Not criminals. Prisoners of war must not be regarded as criminals or convicts. They are guarded as a measure of security and not of punishment. (60)

Attempt of prisoners of war to escape. Prisoners of war may be fired upon and may be shot down while attempting to escape, or if they resist their guard, or attempt to assist their own army in any way. They may be executed by sentence of a proper court for any offense punishable with death under the laws of the captor, after due trial and conviction. It may well be doubted whether such extreme necessity can ever arise that will compel or warrant a commander to kill his prisoners on the ground of self-preservation. (68)

Trial and punishment of prisoners of war. For all crimes and misdemeanors, including conspiracy, mutiny, revolt, or insubordination, prisoners of war are subject to trial and punishment in the same way as soldiers of the army which captured them. (69)

Conspiracy by prisoners of war. If a conspiracy is discovered, the purpose of which is a united or general escape, the conspirators may be rigorously punished, even with death; and capital punishment may also be inflicted upon prisoners of war who are found to have

plotted rebellion against the authority of the captors, whether in union with fellow prisoners or other persons. (70)

Parole. A parole is a promise, usually written, given upon one's faith and honor to refrain from doing a certain thing or things, usually not to bear arms again against one's captors unless duly exchanged. (Author)

According to the French Military Code, "Every prisoner of war, who, having broken his parole, is captured with arms in his hand, is punished with death." (82)

Paroling of enlisted men. No noncommissioned officer or private can give his parole except through an officer. Individual paroles not given through an officer are not only void, but subject the individuals giving them to the punishment of death as deserters. The only admissible exception is where individuals properly separated from their commands have suffered long confinement without the possibility of being paroled through an officer. (74)

Capture of escaped prisoners of war. Escaped prisoners who are retaken before being able to rejoin their own army or before leaving the territory occupied by the army which captured them are liable to disciplinary punishment. (78)

The words "disciplinary punishment" are intended to exclude a sentence of death. The usual punishment for attempts to escape consist in curtailment of privileges or closer confinement or detention. (79)

Prisoners who, after succeeding in escaping, are again taken prisoners, are not liable to any punishment on account of the previous flight. (80)

Care of sick and wounded. Officers, soldiers, and other persons officially attached to armies, who are sick or wounded, shall be respected and cared for, without distinction of nationality, by the belligerent in whose power they are. (102)

Wounded or dead not to be robbed or ill-treated. After every engagement the belligerent who remains in possession of the field of battle shall take measures to search for the wounded and to protect the wounded and dead from robbery and ill-treatment. (110)

Hospitals. Ambulance companies and other sanitary formations shall not be fired upon and shall be protected in the discharge of their duties. (121)

However, the protection due to sanitary formations and establishments ceases if they are used to commit acts injurious to the enemy. (122)

Use of poison. In addition to the prohibitions provided by special conventions, it is especially forbidden to employ poison or poisoned weapons. (176)

Use of treachery. It is especially forbidden * * * to kill or wound treacherously individuals belonging to the hostile nation or army. It would be treacherous to call out, "Do not fire; we are friends," and then fire a volley. To feign death and then fire at an enemy. (178)

Injuring an enemy who has surrendered. It is especially forbidden to kill or wound an enemy who, having laid down his arms, or having no longer means of defense, has surrendered at discretion.

War is for the purpose of overcoming armed resistance, and no vengeance can be taken because an individual has done his duty to the last. And "whoever intentionally inflicts additional wounds on an enemy already wholly disabled, or kills such an enemy, or who orders or encourages soldiers to do so, shall suffer death, if duly convicted, whether he belongs to the Army of the United States or is an enemy captured after having committed the misdeed." (180, 181)

Refusal of quarter. It is especially forbidden * * * to declare that no quarter will be given. (182)

Employment of arms causing unnecessary injury. It is especially forbidden * * * to employ arms, projectiles, or material, of a nature to cause unnecessary injury. (184)

Ruses (tricks, fraud, deception) of war. Ruses of war and the employment of measures necessary for obtaining information about the enemy and the country are considered permissible. (189)

However, ruses of war must not involve treachery or perfidy. (192)

For example: It would be an improper practice to secure an advantage of the enemy by deliberate lying which involves a breach of faith, or when there is a moral obligation to speak the truth, such as declaring that an armistice had been agreed upon when such was not the case. On the other hand, it is a perfectly proper ruse to summon a force to surrender on the ground that it is surrounded, and thereby induce such surrender with a small force.

Legitimate ruses. Among legitimate ruses may be counted surprises; ambushes; feigning attacks, retreats,

or flights; simulating quiet and inactivity; giving large outposts or a strong advanced guard to a small force; constructing works, bridges, etc., which it is not intended to use; transmitting false or misleading signals and telegraph messages, and sending false dispatches and newspapers, with a view to their being intercepted by the enemy; lighting camp fires where there are no troops; making use of the enemy's signals, bugle and trumpet calls, watchwords, and words of command; pretending to communicate with troops or reenforcements which have no existence; moving landmarks; putting up dummy guns or laying dummy mines; removing badges from uniforms; clothing the men of a single unit in the uniform of several different units so that prisoners and dead may give the idea of a large force. (193)

National flags, insignia, and uniforms as a ruse. In practice it has been authorized to make use of these as a ruse. The foregoing rule does not prohibit such use, but does prohibit their *improper use*. It is certainly forbidden to make use of them during a combat. Before opening fire upon the enemy they must be discarded. Whether the enemy flag can be displayed and his uniform worn to effect an advance or to withdraw is not settled. (196)

Spies. A person can only be considered a spy when, acting clandestinely or on false pretenses, he obtains or endeavors to obtain information in the zone of operations of a belligerent, with the intention of communicating it to the hostile party.

Thus, soldiers not wearing a disguise who have penetrated into the zone of operations of the hostile army,

for the purpose of obtaining information, are not considered spies; similarly, the following are not considered spies: Soldiers and civilians, carrying out their mission openly, intrusted with the delivery of dispatches intended either for their own army or for the enemy's army. To this class belong likewise persons sent in balloons for the purpose of carrying dispatches and, generally, of maintaining communications between different parts of an army or a territory. (199)

Spy must be tried. A spy taken in the act should not be punished without previous trial. (208)

Spy immune from punishment after joining his own army. A spy who, after rejoining the army to which he belongs, is subsequently captured by the enemy, is treated as a prisoner of war, and incurs no responsibility for his previous acts of espionage. (209)

Pillage forbidden. The pillage of a town or place, even when taken by assault, is prohibited. (229)

Truce. A truce is a suspension of arms by agreement of the opposing forces,—a temporary cessation of hostilities. (Author)

Flag of truce. A flag of truce is a white flag carried or exhibited by one of the hostile parties, and indicates a desire to communicate with the enemy. (Author)

Fire need not cease when white flag is hoisted. The enemy is not required to cease firing when a white flag is raised. (239)

Armistice. An armistice is the cessation of active hostilities for a period agreed on between belligerents. It must be agreed upon in writing and duly ratified by the highest authorities of the contending parties. (256a)

Soldiers captured violating armistice are prisoners of war. Soldiers captured in the act of breaking an armistice must be treated as prisoners of war. (275)

Safe conduct as to persons. A safe-conduct is a document given to an enemy, alien, or other person or persons by a commander of belligerent forces authorizing him or them to go into places which they could not reach without coming into collision with armed forces actively operating against the enemy. (277)

Safe conduct as to goods. A safe-conduct is a written authority or license to carry goods to or out of, or to trade in a certain place or places otherwise forbidden by the laws of war, given by a commander of belligerent forces to an enemy, alien, or other person. (278)

Safeguard. A safeguard is a detachment of soldiers posted or detailed by a commander of troops for the purpose of protecting some person or persons, or a particular village, building, or other property. The term "safeguard" is also used to designate a written order by a commander of belligerent forces for the protection of an enemy subject or enemy property. It is usually directed to the succeeding commander requesting the grant of protection to such individuals or property. (282)

Forcing a safeguard. The penalty in our army for forcing a safeguard is death. (57th Article of War)



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